Global Rates Weekly

Switching gears

22 September 2017

The View: switching gears

With the Fed giving data a free pass over the coming months, the global rates outlook moves from central banks to 1) fiscal policy, 2) global growth, and 3) geopolitical risk.

– R. Preusser, S. Rajan

Rates: a different ball game

US: A bipartisan deal on tax and budget could easily add to UST supply, and a slower Fed changes the composition of rate sell-off.

EU: We like 5y ASW wideners as a hedge to underpriced (geo)political risks.

UK: We see a benign supply outlook for Gilts over the remainder of this fiscal year.

JY: City banks are limited to cut JGBs. Foreign investors revive, and lifers remain aloof.

AU: We retain curve steepening exposures as hikes still look like a 2018 prospect.

– Rajan, Zhang, Satko, Hourihane, Cross, Capleton, Ohsaki, Morriss, Sam

Front end: low and high hurdles in a hike

US: We discuss market implications of the September Fed meeting.

UK: We don't see the BoE hike again soon - fade the steepness in the very front end.

– M. Cabana, O. Lima, S. Cross, M. Capleton

Volatility: enter 2s5s conditional bull steepeners

US: Our analysis suggests 2s5s now have room to steepen if rates were to decline. We like conditional bull steepeners to hedge against risk events that lower Dec hike odds.

– C. Zhang, S. Rajan

Spreads: a shift in consensus on GSE reform

US I: Republican National Committee now supports preservation of Fannie and Freddie.

US II: Higher deficits resulting from a tax deal could tighten spreads across the curve.

– R. Axel

Inflation: isn't convexity just "nice to have"?

EU: convexity makes a big difference for matched-maturity 30y OAT BE shorts.

– M. Capleton, S. Cross

Technicals: signal calls for tactical relief rally

US 10y and 30y yields closed higher than the closes four days prior nine days in row. This pattern suggests the trend may reverse.

– P. Ciana

Special Topic I: EUR strength places focus on flows

July saw EU equity inflows surge to 5y highs, coinciding with EUR strengthening.

– R. Hourihane, K. Sharma

Special Topic II: treasury market flows

Watch for the balance between reserve manager and foreign private flows from here.

– C. Zhang, S. Rajan

Rates Research

Table of Contents

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Our medium-term views

	Rationale
Duration	• US: With the market now pricing >60% chance of a December hike; we turn neutral the front end of the curve. We remain short the 5y-10y point on the belief that tax reform chances are higher than priced in and will push term premium 40-60bp higher if passed. • EU: We expect EUR duration to move more in line with the (improving) economic data and the effective reduction in the amount of duration the ECB absorbs in Bunds through QE. Still, in swaps, we see potential for EUR rates to outperform US, especially in 5y5y forward • UK: structurally bearish Gilts on stretched cross-market valuations but hedged near term due to favourable supply and demand dynamics
Front end	• US: The Fed set a low hurdle for a December hike and a high hurdle for stopping the balance sheet unwind, which should result in tighter funding conditions & greater repo specials over time. Bill supply will be subdued (+$100bn) in the near term due to the debt limit but should increase heading into year end. • UK: we like front end flatteners as we don't see the BoE hiking as much as market pricing. We also like being short 3y Gilts vs. OIS on Brexit risks. • EU: Longer term, our bias is still long as we believe forward guidance on rates will have to strengthened, given tapering is technically inevitable at this stage. However, given current stretched valuations, we have tactical bearish trades via Euribor curve steepeners and put spreads • AU: We anticipate for the case to build for an eventual modest normalization of RBA policy, but not until next year. The AUD OIS curve is relatively flat and we like 5m vs 12m OIS steepener.
Curve	• US: We flip our long-held flattening bias and believe the curve should steepen from here as terminal rate pessimism fades. We believe easier fiscal policy, higher deficits and higher inflation expectations is likely to steepen intermediate curves (2s-5s, 3s-7s) • EU: in swaps, corporate issuance in 10s and potential ESM paying can continue to push the curve steeper. We highlighted 7s20s steepener as a better carry alternative to outright shorts. In cash, Long-dated issuance comes on the back of high demand & thus should not put lasting pressure on govie curves. • JP: We see the JP curve steepening through 2017 as the BoJ steps back from intervening in quantities • AU: We expect the 5s-10s curve to steepen, driven by the attractive mid-curve carry opportunities while higher inflation and supply weigh on the long-end. • UK: Gilt flows suggest continued demand for ultra-long end cash. We like being long UKT 2068s versus 10y20y swaps.
Inflation	• US: We turn bullish on breakevens as the USD impact should start to pass through while consensus remains overly bearish. • EU: Underlying "lowflation" forces are being masked by base effects lifting inflation temporarily. We would be short 10y10y EZ inflation versus US. • UK: We like 5s50s real curve flatteners. Forecast slide in inflation makes front-end expensive and November index events should prompt rebalancing longer. • AU: Headline inflation prospects are skewed to the upside for the rest of this year. We favor long breakeven positions at the front-end.
Spreads	• US: 10y and 30y spreads biased wider. Front end spreads are tracking Libor and Lib-GC. GSE reform may be 2017 event. • EU: We like long-end BTP flatteners and short the belly of 5s10s30s BTP fly as ways to hedge against wider spreads with decent C&R. We also stay short 10y SPGBs vs OATs. In swap spreads we recommend wideners in the 5y to position for autumn risk events and increase repo richness relative to the longer-end. • AU: RBA risks have changed. We now see cross market spread compression looking more mature.
Vol	• US: Our analysis suggests that 2s5s now have room to bull steepen if rates were to decline from here. We recommend conditional bull steepeners to hedge against risk events that could lower Dec hike probabilities. Further out the curve, we think payer skew is cheap. • EU: the rebound in vols driven by the Bund selloff was short-lived. Vs rates, vol remains cheapest in intermediate expiries on 10y and 30y tails, and are least cheap the top left (likes of 1y1y, 1y2y). Like in the US, we exploit the richening of payer skews in short/medium tails with a 2y5y payer ladder.

Our key forecasts

(% EOP)	2015	2016	2017	1Q17	2Q17	3Q17	4Q17	1Q18	2Q18
Fed Funds	0.25-0.50	0.5-0.75	1.25-1.5	0.75-1	1-1.25	1-1.25	1.25-1.5	1.5-1.75	1.75-2
10-year treasuries	2.27	2.44	2.85	2.39	2.30	2.40	2.85	2.85	2.85
ECB refi rate	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10y Bunds	0.63	0.21	0.55	0.33	0.47	0.50	0.55	0.60	0.65
BOJ	0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10
10y JGBs	0.26	0.05	0.07	0.07	0.09	0.07	0.07	0.08	0.08
BoE base rate	0.50	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
10y Gilts	1.96	1.24	1.50	1.14	1.26	1.30	1.50	1.70	1.80
RBA cash rate	2.00	1.50	1.50	1.50	1.50	1.50	1.50	1.75	1.75
10y ACGB	2.88	2.77	3.05	2.76	2.66	2.80	3.05	3.10	3.10

Source: BofA Merrill Lynch Global Research

What we like right now

AMRS	We like 2s-5s curve steepeners, short US 5y5y vs EU, wider 30y spreads and 5y breakeven longs.
EMEA	In EUR, we like positive carry hedges to (geo)political risks, such as 5y swaps spread wideners. We are short breakevens. In the UK, we pay 1y2y Gilt yields.
APAC	We like steepeners in Japan and Australia. We also see value in AU 5y breakevens.

For a complete list of our open and closed trade ideas, please refer to Rates Alpha trade recommendations.

The View

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The week that will be

With the Fed giving data a free pass over the coming months, the rates outlook moves from being data dependent to three critical factors: 1) The momentum in Congress on the fiscal front; 2) Global growth and the global central bank outlook – the BoC, BoE and ECB are all expected to take further steps towards an exit; and 3) Growing geopolitical risk. The former two remain a key trigger for higher rates and higher term premiums with the latter lurking as the unmeasurable risk.

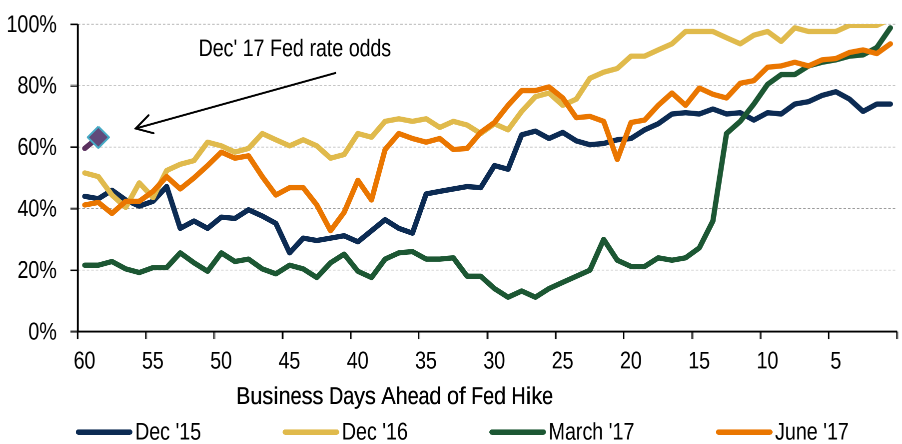
Political news should dominate headlines next week – the "gang of six" is scheduled to give more details on the tax plan next week and the Senate continues to try a last ditch effort (again) on healthcare. We would monitor 1) the progress by the Republican Congress on passing a budget (at least a skinny one) given that a reconciliation process to pass tax reform is out of the question without a budget, 2) The effect of passage of the Graham-Cassidy healthcare bill on the recent optimism around bipartisanship in Washington.

The week that was

The Fed's dots which revealed that the vast majority of Fed officials (11 members) still expect another hike in December was the main event of the week. With the market now pricing in greater than 65% chance of a Fed hike (a level never reached this far ahead of an actual hike in this cycle), we are more neutral the front end of the curve.

We remain short the intermediate (5-10y) part of the US curve, short 5y5y US rates relative to Europe, steepeners in AU and in 5y asset swap wideners in EU.

Chart 1: The market has never priced a 65% hiking probability this far ahead of a meeting this cycle



Source: BofA Merrill Lynch Global Research, Bloomberg

Rates – US

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A different ball game

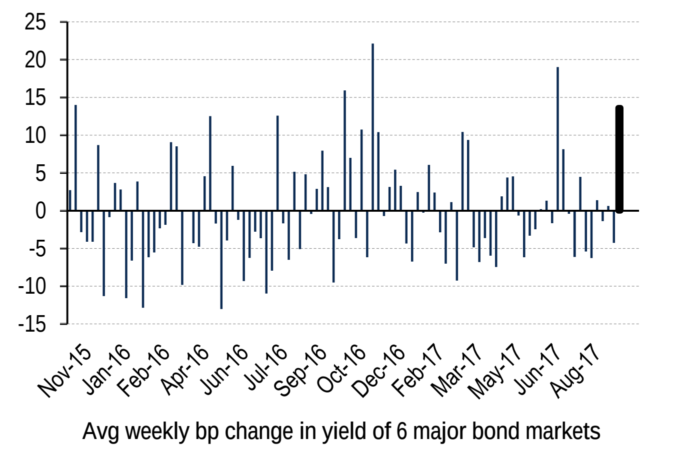
- Trading politics in bond markets has shifted from 4Q16 - a bipartisan deal + a Fed closer to r* changes the playing field. The former shifts the calculus on deficits and UST supply while the latter changes the composition of the yield sell-off.
- The risk scenario is a "behind the curve trade" - we like long breakevens, curve steepeners and payer skew..

This piece was originally published in Liquid Insight: A different ball game

Tectonic shifts

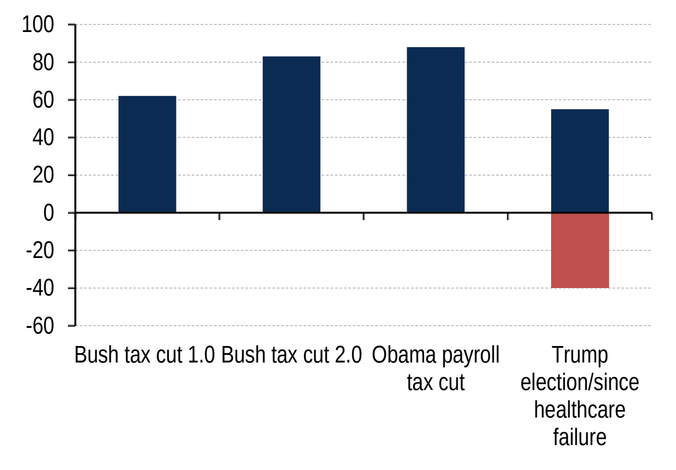
Global rates markets have returned from the abyss, staging an impressive yield rise over the last week. In fact, there have been only 12 weeks since the 2013 taper tantrum that we have seen a synchronized sell-off in the six major global bond markets (US, EU, UK, CAD, JY and AU) and last week was one of them. From little priced two-weeks ago, markets are now staring at a 50% chance of a BoE hike in November, a 60% chance of a Fed hike in December and 80% chance of yet another rate hike by the BoC by the end of the year. By and large, the near-term trade for a push higher in yields from central bank expectations is largely done. The attention now shifts back to Congress and tax reform. Future expectations of monetary policy are now again contingent around current progress on fiscal policy.

Chart 2: The synchronized sell-off: Average weekly change in yields across US, Germany, UK, CAD, Japan and Aussie govt bonds



Source: BofA Merrill Lynch Global Research

Chart 3: Change in term premium vs. tax cuts: Prior episodes vs. today



We use change in Kim Wright term premium from the day of introduction of tax cuts in 2003 and 2010 and the day of the election in 2001. Source: BofA Merrill Lynch Global Research

Fiscal policy – and the shift to bipartisan talks

To us, the biggest change in fiscal policy expectations over the last few weeks is the higher probability of a bipartisan deal today. As we mentioned last week, if a bipartisan deal for tax cuts emerges, there would be (1) no need for it to be deficit neutral and (2) no requirement for a budget to be passed. We think this could be a game changer for UST supply.

On our estimates, an unfunded, bipartisan deal for tax cuts (assuming most of the tax cut goals were maintained with the revenue raisers dropped) could immediately raise 2018 deficits by around $400bn from today's baseline and $200-$220bn from the funded tax cuts scenario[1]. Note that even if tax cuts were "funded", they would add to immediate deficits since the growth assumptions would take time to realize.

Monetary policy – and the risk of a "behind the curve" trade

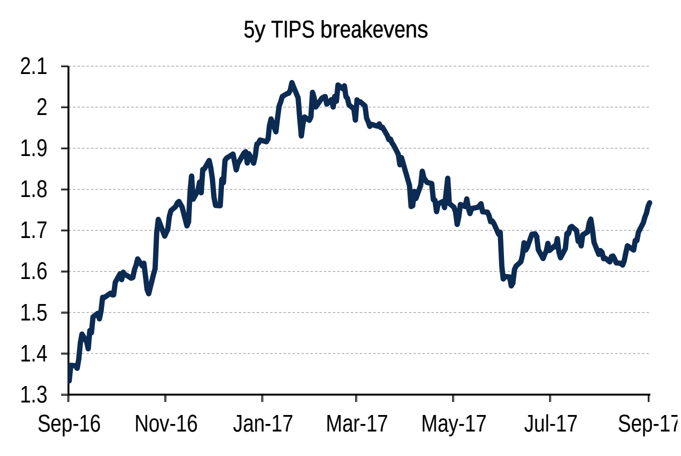
On the monetary policy side of things there are two critical shifts in the landscape. 1) After one more hike in December, the Fed is going to be much closer to the neutral rate than it was in 2016. While a "catch-up" to the neutral was possible on a soft data surge back in 4Q16, today the move is likely to be slower; the Fed would likely need evidence of r* moving higher before they turning notably hawkish. 2) The Fed could be on the cusp of a leadership change, with possibly a new Chair, Vice Chair and Vice Chair of Supervision joining over the next six months. So the market's perception of their ability to significantly speed up their hiking cycle/change their reaction function could be limited relative to last year.

Waiting for the "hard data" to show evidence will almost certainly make the Fed slightly late to the game while the leadership transition may lead to the market not readily shifting short-term real interest rates or 2018 rate expectations higher any time soon. This raises the tail risk that easier fiscal policy could be met with slower to adjust monetary policy resulting in central bank "behind the curve" trade in the markets.

Trading the confluence

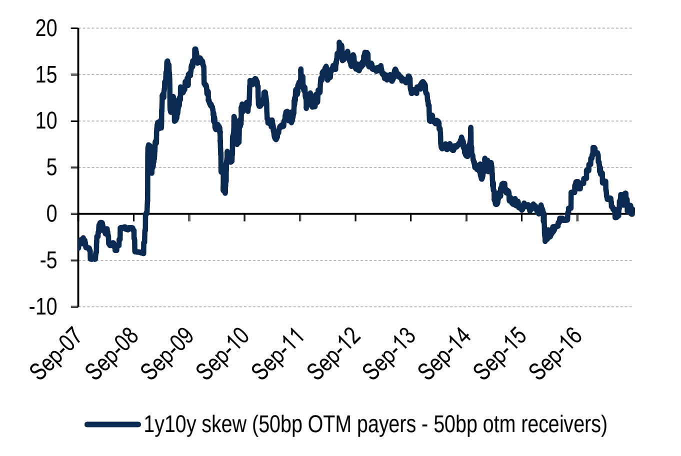
Clearly the above is highly binary. After all, it depends on the ability of fiscal policymakers to reach a deal and guesses on the reaction function of monetary policymakers: both far from being sure shots. Yet, this low probability combination has become slightly more likely in the last three weeks. Our recommended trading strategy for this scenario, centers around four themes: 1) Long breakevens 2) Steeper 2s-5s curves 3) Long payer skew and 4) Short intermediate swap spreads.

Chart 4: We expect the recent rise in BEs to continue into year-end



Source: Bloomberg

Chart 5: Payer skew is too flat and is likely to richen under a deficit expansionary tax reform scenario, in our view



Source: BofA Merrill Lynch Global Research

[1] The two major revenue raisers (excluding the ruled-out BAT) are repealing itemized deductions and personal exemptions which combined raise $300bn annually. Assuming these are dropped and exchanged for a slightly higher marginal tax rate on the high income earners which raises ~75-100bn/yr, net revenue raisers of ~200-225bn would be lost.

Rates – EU

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- The recent tightening in swap spreads puts them back in line with fundamentals
- Looking ahead, we continue to like swap spread wideners as a hedge to underpriced (geo)political risks and prefer the 5y point vs the 2y and 10y

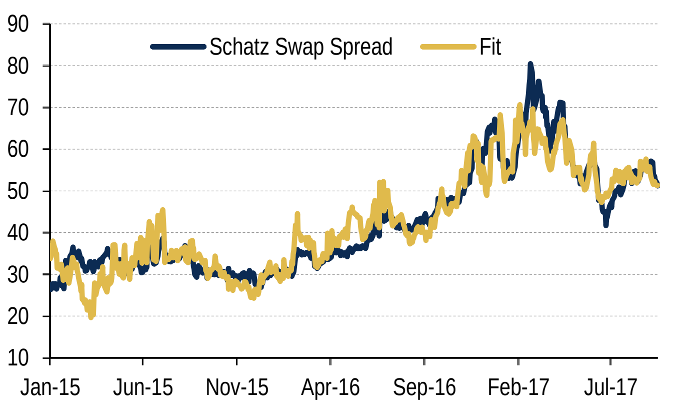
German swap spreads are back in line with fundamentals

5y OBL swap spreads have tightened last week and now trade more than 3bp below the 8-September peak. We think this move is unlikely to be sustained going forward unless the market turns overly bullish on peripheral debt or fully prices away geopolitical risks.

In fact, current swap spread levels are right in line with where repo and risk pricing would imply them to be (Chart 6). As we showed in the past, a simple regression of swap spreads against 3m OIS/repo GC and a risk proxy encompasses the greatest drivers of swap spread RV (explaining over 90% of their volatility). According to this measure, the Schatz spread to Euribor swaps was almost 4bp too wide on 8-Sep.

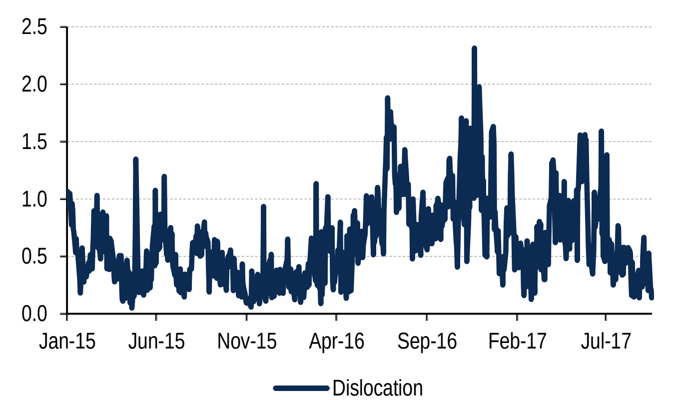
Consequently, this tightening over the last week has just corrected German Schatz spreads back to fair from too rich levels with respect to fundamentals (collateral demand and OIS/GC). Beyond the 2y tenor, the fact that other maturities trade very close to where the first two principal components would imply them to be, suggests that such correction is not limited to the 2y. In fact, swap spread dislocations (Chart 7) are close to the lowest since November 2015.

Chart 6: Front-end swap spreads now trade in line with fundamentals...



Source: BofA Merrill Lynch Global Research, Bloomberg. Comment: Fit refers to the result of equation =B1*3m OIS-GC +B2*risk proxy + A. Values in basis points

Chart 7: ...with other tenors (2y to 10y) trading fair vs common factor



Source: BofA Merrill Lynch Global Research, Bloomberg. Comment: dislocation is the standard deviation of the nine *regression residuals* across time. We track the residuals of the 2y to 10y swap spreads vs their OLS fit using the first two principal components (PCA) of swap spreads as regressors

Positive carry geopolitical hedges still attractive

Given our belief that 1/ the North Korean crisis may come to a head in the not too distant future and 2/ the increased likelihood of a government shutdown later this year, we continue to advocate (geo)political hedges. However, with vol low, and the exact timing of the above events uncertain, positive carry hedges, and in particular EUR swap spread wideners remain our favoured expression. In our view, the 5y point offers most value (currently trading at 50bp), with carry most attractive (+2bp) vs 2s and 10s (-1.3bp and +0.8bp respectively).

Looking ahead, supply/demand picture looks favourable for 5y OBL

The German Finance agency canceled the €3bn 5y auction previously scheduled for late Nov. This results in severe supply mismatches on the curve, with just €6bn of 5y issuance between now and year-end, versus €16bn of 2y supply and €11bn of 10s. 5y ASWs would also stand to benefit more vs 10s should official sector/Central Bank buying of the EUR continue to accelerate. Furthermore, and as highlighted previously, it is in the 2y and 5y parts of the curve that the Bundesbank have most room for further QE buying/reinvestments, with purchases likely focused in these sectors going forward. Currently, however, we prefer the 5y point vs 2s for a number of reasons:

1. Improved balance sheet availability and "more efficient collateral management practices[2]" have reduced richening pressure on GC repo rates and, in turn, Schatz spreads. Indeed, usage of the ECB's cash collateral facility fell to just €13bn ahead of the Q2 quarter-end, vs €18bn in March, highlighting easing repo pressures.

2. Should the ECB drop QE purchases to €20bn/m from Jan, as was apparently studied at the Sep meeting, it would significantly reduce Bundesbank's requirement to buy below the depo rate. While not our base case, the probability of this option is rising.

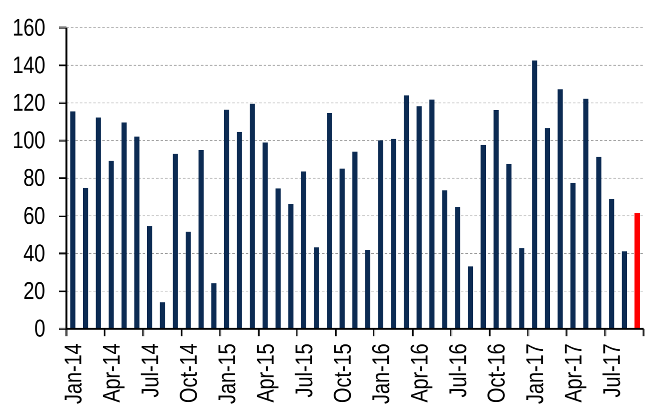
Corporate issuance is unremarkable and pivoted around the 10y, not the 5y

Total EUR-denominated bond issuance from privates has reached just €63bn this month so far. Assuming an unchanged run rate, September private issuance is set to reach an unimpressive c.€88bn. To put these numbers into perspective, the average September issuance in 2015 and 2016 amounted to €106bn. From a corporate credit perspective, our credit strategists do not believe the German elections have had any impact on the primary market so far. As the macro conditions remain the same, corporate credit supply in October should remain in line with historical values.

The controlled EUR issuance taken together with the fact that SSAs and Financials account for 60% of total September issuance instead of the usual >70%, suggests that the cumulative issuance impact on German ASWs has been muted this month.

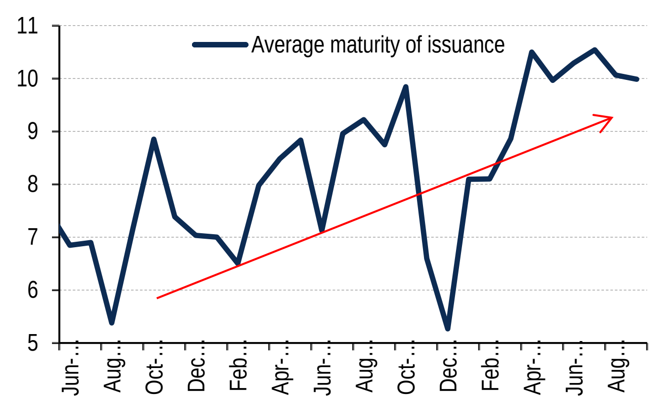
Looking ahead, the October private EUR supply along with the participation of SSA / Financials in line with previous years' experience puts downside risks on 10y spreads in particular. In fact, this year's weighted average maturity of issuance is significantly higher than in 2015-16 and is pivoted around the 10y maturity. As a result, hedging activity is also expected to be denser in the 10y than elsewhere on the curve.

Chart 8: Unimpressive issuance is unlikely to pressure spreads much tighter from here



Source: BofA Merrill Lynch Global Research, Bloomberg. Total EUR denominated private bond issuance (EUR bn)

Chart 9: Relative to previous years, this autumn's issuance is pivoted around the 10y maturity instead of 8y-9y



Source: BofA Merrill Lynch Global Research, Bloomberg. Values in years

[2] ECB Economic Bulletin: Sep 2017

Rates – UK

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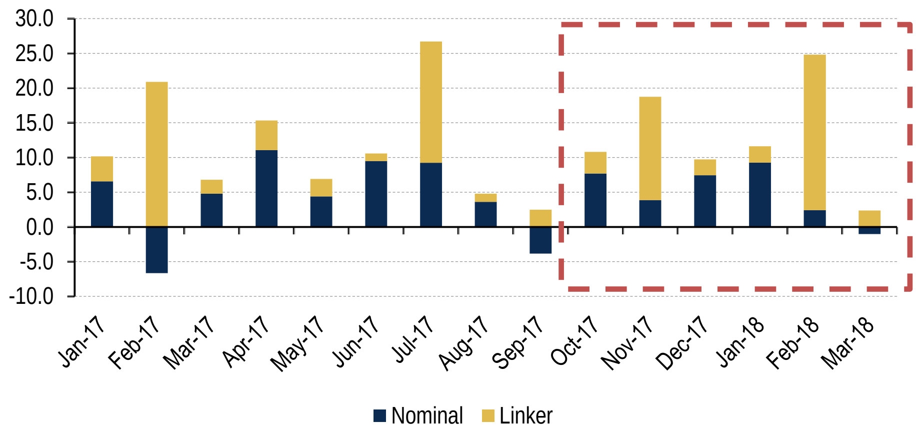
- We see a benign supply outlook for Gilts over the remainder of this fiscal year. While we see mispricings in current yields, October lacks a catalyst for a correction.

Benign supply environment to keep Gilt yields contained

The market has had little in the way of risk to absorb over the last two months due to the summer supply-lull and the BoE's £10bn reinvestment. However even with the BoE done for now, the combination of March's £18bn buyback and no more nominal syndications due this fiscal year leaves a very benign risk outlook for nominals over the coming months. We expect linkers to be the primary source of risk delivered to the Gilt market in coming months (Chart 10), driven by November and February when we expect the two remaining linker syndications.

Chart 10: Gilt market risk delivery net of BoE buying split by type, £m per bp



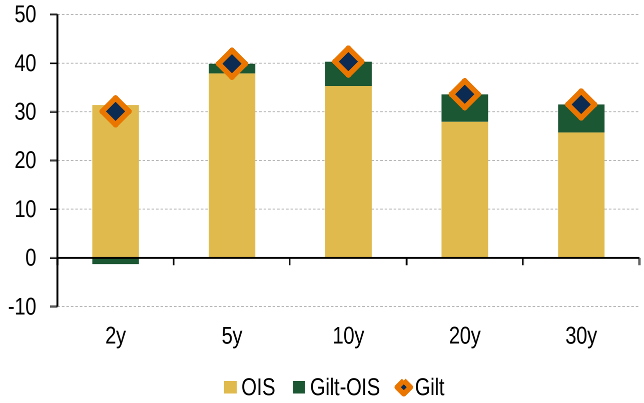
Source: BofA Merrill Lynch Global Research, DMO, BoE. Note: red box indicates forecasts. The BoE currently only buys/holds nominals as part of its QE portfolio, therefore BoE buying in risk terms is deducted from nominal risk delivery.

Decomposing the sell off

10y Gilt yields have sold off 40bp from their recent lows. Chart 11 decomposes the sell off across the curve into movements in OIS rates and the Gilt-OIS spread, showing that the majority of the move has been driven by a repricing of the expected path of the risk-free rate. We think the reaction to last week's hawkish noises is overdone, both in the front end (see UK front end section) and further out the curve.

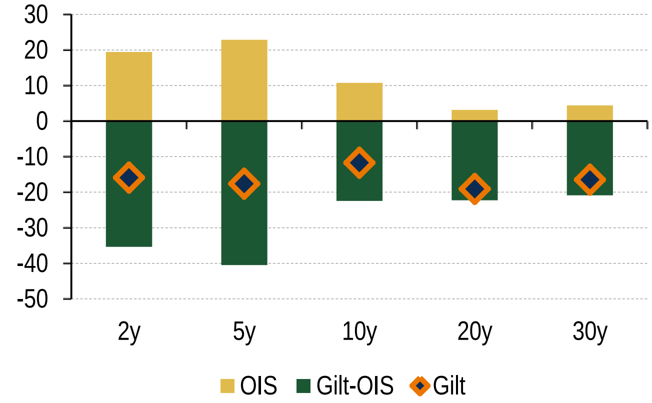
Looking at the move in yields since the Brexit referendum last year, 10y Gilt yields are c. 10bp lower today. However this hides a divergence in the underlying dynamics; 10y OIS is marginally higher while the Gilt-OIS spread is 20bp tighter. While this pricing makes sense on a backward-looking basis (the BoE took a considerable amount of supply out of the market which is only just starting to be offset), we would argue these moves are not reflective of the dynamics the Gilt market faces from here.

Chart 11: Decomposition of gilt yield changes since 7th Sept 2017, bp



Source: BofA Merrill Lynch Global Research

Chart 12: Decomposition of gilt yield changes since 22nd June 2016, bp



Source: BofA Merrill Lynch Global Research

Taking stock since the sell off

We see conflicting forces driving yields from here; if our expectations that any BoE rate hike is unlikely to followed by a second transpires then the recent rise in 10y OIS will likely be reversed. However we continue to oppose the tightening in Gilt-OIS since the referendum given the medium run supply dynamics facing the Gilt market and implied lack of any risk premium priced in to Gilts.

The reversal of both of these factors is unlikely to happen in the coming weeks, absent a sharp downturn in the activity data. However from a supply perspective October is set to be a quiet month. The Conservative party conference poses a risk of strong political rhetoric and the Brexit negotiations reach a reflective point as Barnier goes to the EU council to report whether 'sufficient progress' has been made to move on to discussions of a new trade deal (it is looking increasingly unlikely). But unless there is a strong indication that Brexit talks are likely to breakdown, neither is likely to move Gilt yields meaningfully (we see a breakdown in Brexit talks as a front end spread widener).

Rosy fiscal numbers unlikely to be reflected in outlook for the deficit

The most recent public finance figures paint a much rosier picture of the government's fiscal health than we would have expected post-Brexit. This reflects both the stronger than expected employment gains and consumption, with both income tax receipts and VAT marginally stronger so far this fiscal year than at the same point last fiscal year. However we do not see this being reflected in the outlook for the deficit given the political pressure on the Chancellor to ease austerity (see here).

Rates – JY

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JSDA's Trading Activity by Investor Type for August

- Amid net selling by regional and shinkin banks, city banks were big buyers of TBs. Can they cut JGB holdings any further?
- Foreign investors made a comeback as JGB buyers, but life insurers retreated even more to the sidelines

City banks switch from long-term to medium- and superlong-term JGBs, purchase large amount of TBs

City banks purchased a net ¥2,228.2bn of mainly TBs. As the yield decline continued and the BoJ reduced its purchase of JGBs with maturities over 5yr and up to 10yr, city banks sold a net ¥769.9bn of long-term JGBs, but they were net purchasers of superlong- and medium-term JGBs. This was the first time that city banks were net sellers of long-term JGBs since March, and the net sale amount was the largest since October 2015. Under the BoJ's yield curve control (YCC), long-term JGBs do not hold out much hope for capital gains or income gains, and switching from this sector to others was conspicuous. City banks were net purchasers of superlong-term JGBs for a fourth consecutive month in August. They were also net purchasers of about ¥2trn of TBs, their largest purchase since the fiscal yearend month of March. In the 9 August auction of 3-month TBs, the TB yield rose to about -0.1%, and we believe the large net purchase signaled the emergence of demand that the banks want to fill before the end of 1H FY17. The JGB holdings of city banks might have declined as far as they can (Bond investment by megabanks). If so, JGB purchasing by the BoJ is likely to become increasingly difficult (With stock effect in YCC, BoJ's purchase operations likely to keep declining). Under YCC, fund management in JGBs cannot be expected to improve much, and financial institutions, losing their earning opportunities, will be the focus of close scrutiny regarding their bond investment trends. JGB trading by city banks (sales + purchases) was ¥8trn in August, the highest amount since December 2015. Since the BoJ embarked on QQE, trading by city banks has trended downward, and the introduction of a negative interest rate pushed it down further. We believe that JGB trading in the secondary market will continue waning due to the BoJ's large bond purchases.

Regional banks sold a net ¥547.6bn of mainly long-term JGBs. This was their first net sale in four months, and it was their largest net sale of long-term JGBs (¥494.9bn) since December 2014. Shinkin banks sold a net ¥529.6bn of mainly long- and superlong-term JGBs. This was their largest net sale since record-keeping began in April 2004. As yields declined, both regional and shinkin banks were conspicuous sellers. Agriculture- and forestry-affiliated institutions purchased a net ¥14.2bn of superlong-term JGBs, but they were net sellers in other sectors, which almost cancelled out this net purchase.

Insurers retreat even more to the sidelines

Life and nonlife insurers purchased a net ¥94.8bn of JGBs, which included ¥119.6bn of superlong-term JGBs. This was their smallest net purchase since April 2017. Some dip buying was seen in July, but the 30yr JGB yield declined to 0.82% in August, reinforcing the wait-and-see stance of insurers. JGB prices rose after the introduction of QQE, and net purchasing of superlong-term JGBs by insurers has trended downward. The monthly average was ¥742bn in FY12, declining to ¥500bn in FY13 (the year QQE was introduced), ¥382bn in FY14, and ¥321bn in FY15, before edging up to ¥339.1bn in FY16. So far in FY17, the monthly average net purchase has been a low ¥174.9bn. Given the restrained purchasing of the past few years, we believe there is some pent-up demand for JGBs. Purchasing of foreign bonds has also been restrained in FY17.

Attention is focused on whether JGB purchasing will also increase (FY16 bond investment by life insurers: demand for "JGBs low, foreign bonds high" continues).

Trust banks (pensions) purchased a net ¥269.9bn of mainly TBs. Trust banks have been net purchasers of superlong-term JGBs for nine consecutive months since December 2016 (GPIF releases FY16 fund management results).

Foreign investors make largest interest-bearing JGB purchase since April 2016

Foreign investors use central bank forex reserves to engage mainly in short rolls, but they did purchase a net ¥2,913.4bn of interest-bearing JGBs in August. Their net purchasing of interest-bearing JGBs has continued for 38 months since July 2014. In June and July their monthly net purchases declined to about ¥700bn, but their August purchase was the largest since April 2016. Foreign investors were net purchasers across the entire curve, even in superlong-term JGBs (¥54.6bn), where in July they were net sellers for the first time in eight months. In the first half of August, the 2yr yield rose to -0.11% and the 5yr yield to -0.06%, making these maturities appear cheap on the curve, and net purchasing of medium-term JGBs by foreign investors rose to ¥1,921.1bn, its highest level since January. In August, the spread of JGB ASW over US Libor rose, but it has declined again more recently, making it unclear whether the fund flow from overseas will continue.

Table 1: **JGB trading by investor type (August 2017) (¥bn) Sales-Purchase [Net buying (-), Net selling (+)]**

	Total Govt Bond	Interest-bearing Govt Bond	By maturity: Long-term (over 10 yrs)	Long-term	Medium-term	Zero Coupon	TB
City Banks & Long-Term Credit Banks	-2,228.2	-221.7	-387.9	769.9	-603.7	0.0	-2,006.5
Regional Banks	547.6	547.6	58.6	494.9	-5.9	0.0	0.0
Trust Bank	-266.9	104.3	-71.2	1.6	173.9	0.0	-371.2
Financial Institutes for Agr. & Forestry	2.4	2.4	-14.2	20.5	-3.9	0.0	0.0
2nd Regional	182.5	182.5	59.9	121.6	1.0	0.0	0.0
Shinkin Banks	529.6	529.6	218.7	310.9	0.0	0.0	0.0
Other Financial Institutes	-113.6	130.7	45.3	38.3	47.1	0.0	-244.3
Life & Non-Life Insurance Companies	-94.8	-77.2	-119.6	43.5	-1.1	0.7	-18.3
Investment Trusts	-6.8	-18.5	-40.7	32.2	-10.0	0.0	11.7
Mutual Aid Association of Govt. Offices	20.2	20.2	5.5	7.4	7.3	0.0	0.0
Business Corporations	12.0	12.1	2.7	8.4	1.0	-0.1	0.0
Other Corporations	9.0	9.0	13.9	-5.3	0.4	0.0	0.0
Foreigners	-20,927.8	-2,913.4	-54.6	-937.7	-1,921.1	0.0	-18,014.4
Individuals	2.7	2.7	0.0	2.3	0.4	0.0	0.0
Others	22,972.8	3,117.0	569.7	997.8	1,549.5	0.0	19,855.8
Bond Dealers	28.3	-64.5	-11.0	-24.3	-29.2	0.0	92.8
Total	669.0	1,362.8	275.1	1,882.0	-794.3	0.6	-694.4

Source: Japan Securities Dealers Association. Note: 1) From data on bond trading activity by investor type, we look at trading activity for various JGB types (superlong, zero-coupon, etc.) 2) The amount of sales and purchases is the total of the amount of sales and purchases by investors excluding repos and the amount of trading by members

Please refer Japan Rates Watch: JSDA's Trading Activity by Investor Type for August for more details and charts.

Rates – AU

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- A significant shift in market pricing of RBA policy tightening is being driven by stronger data, positioning and more upbeat policy communication.
- This has flattened the curve despite AU US 10y underperformance. The curve should be steeper without an explicit change in policy bias.

A significant shift in RBA pricing

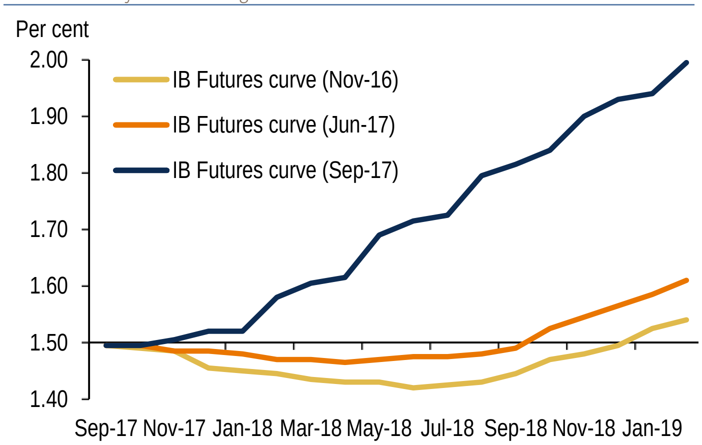
The market probability for a 25bps hike in cash rates by May 2018 has risen above 90% from a level below 50% as recently as September 12th. We continue to expect the start of a modest normalization cycle with a hike in February 2018. The probability of a February hike has risen 44% from a low of 14% at the start of the month (Chart 13). What has prompted the change?

The domestic data has continued to print on the strong side of expectations, notably the labour force data. This has helped to underpin RBA confidence in the outlook and a much stronger sense of optimism that wages growth will pick up over time.

RBA officials remain notably upbeat on the global outlook. Assistant Governor for Economics Luci Ellis: "There seems a reasonable prospect that – as long as nothing really bad happens – this global expansion could continue for a while."[3] RBA Governor Lowe warned of higher rates in his speech on 21st September, but indicated this was not imminent.

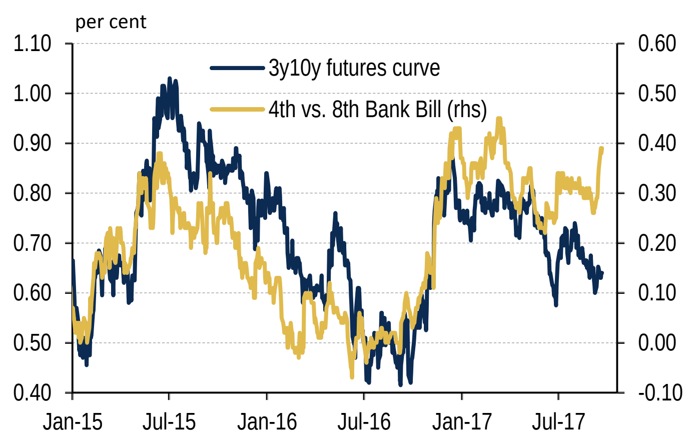
It is also notable there has been a shift in domestic sentiment towards RBA policy as 3 of the big 4 large domestic banks now expect the next move in rates to be up and two of these now see two hikes next year following changes in view this month. The moves in market pricing have been more striking.

Chart 13: Two hikes now priced for 2018
Interbank 30day futures change over 3-months and since the US election



Source: BofA Merrill Lynch Global Research, Bloomberg

Chart 14: A steeper Bank Bill curve is yet to impact the 3y10y bond curve
Front-end weakness has resulted in 3y underperformance



Source: BofA Merrill Lynch Global Research, Bloomberg

Positioning has contributed to the speed of the adjustment in the rates market. We identified a long imbalance across the curve ahead of the bond futures rollover on 15th

[3] http://www.rba.gov.au/speeches/2017/sp-ag-2017-09-20.html

September. What has been a surprise is the relative weakness of the 3y bond compared to 10y bonds based on positioning so the market repricing of the RBA – and a steeper Bank Bill futures curve – has coincided with a flatter bond yield curve (Chart 14).

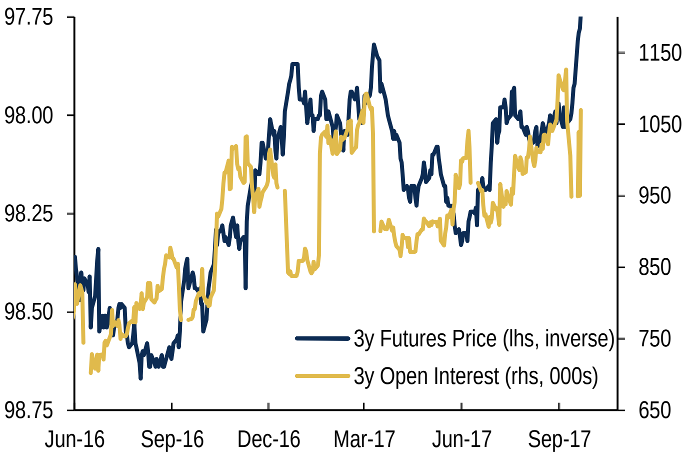
It is the sharp move lower for the 3y bond future over the futures roll that has kept the curve flat despite the change in short-end pricing (Chart 15). The curve should be steeper and the divergence is unlikely to be sustained.

Curve flattening has been even more difficult to reconcile with the extended widening of the AU US 10y bond spread now that a 7-year downtrend has broken. We discuss in more detail the reasons for the drop in the AU beta to moves in the US market in both bull and bear markets here: Australia Rates Viewpoint: The case for underperformance 14 September 2017. The widening can be seen in the faster rise in the AU 3-month Bank Bill rate strip relative to the Eurodollar strip, even after the near-term hawkish guidance from the Fed this week. We are yet to see an explicit shift in RBA guidance.

Any further weakness in global bond markets should steepen the AU curve considering the extent of the re-pricing at the front-end in the absence of a shift in bias from the RBA and positive carry of +10bps/Q for short-dated bonds from Mar-19 to Nov-20.

Chart 15: Positioning may have become unbalanced

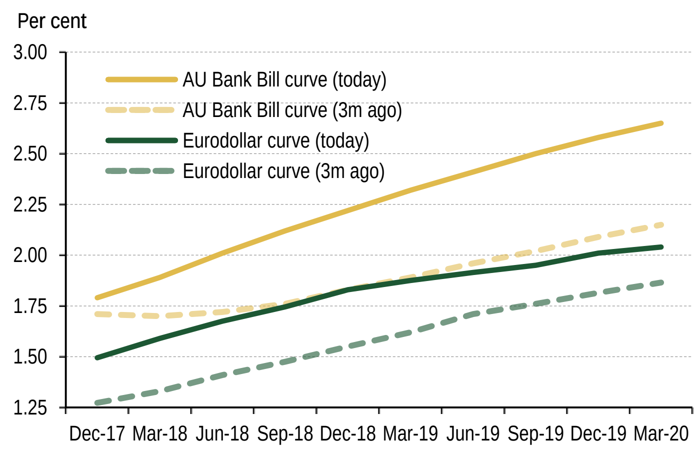
3y open interest hit a record high just prior to the rollover.



Source: BofA Merrill Lynch Global Research, Bloomberg

Chart 16: AU Bank Bill shift has been faster than the US

We continue to look for the first RBA move to be in February 2018.



Source: BofA Merrill Lynch Global Research, Bloomberg

Update on current positions

We retain other positions that should benefit from a gradual removal of accommodation by the RBA: We initiated a 5-month to 12-month OIS curve steepener in July at +6bp (current level is +12bps) and we are positioned for a steeper bond curve via a QTC21 vs. ACGB26 steepener trade that was initiated at 23bps in January and is currently at 32bp but has also benefited from +5bp/quarter. Risks to these trades is an earlier than expected move to lift rates. We also see higher AU headline inflation due to domestic factors, and have been positioned via a long 5y breakeven from 172bps. The current level is 176bp. Risk is for unexpected weakness in Q3 CPI data.

Our Feb-OIS/3y/10y swaps fly hit our -6bp stop this week (initiated in July at -12bp). The sell-off in the 3y part of the curve accounts for most of the compression as the position was designed to benefit from a steeper AU curve and a rise in policy risks from a heavy round of communication by the RBA over the past two months. We remain constructive on the scope for further curve steepening and the swaps fly is cheap relative to the 3y10s futures curve.

The RBA board next meets on Tuesday 3rd October. The next major economic release that could have a significant impact on policy expectations is the Q3 CPI data on 25th October.

Front end – US

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- This week the Fed set a low hurdle for a December rate hike and a high hurdle for stopping the Fed portfolio unwind
- This should keep near-term odds for a December hike elevated and result in tighter funding conditions / more repo specialness in coming years

FOMC signaled a relatively low near-term hurdle for a December rate hike
Fed communications suggested it has a low near-term hurdle for a December rate hike due to (1) expected volatility of near-term economic data (2) a low inflation target.

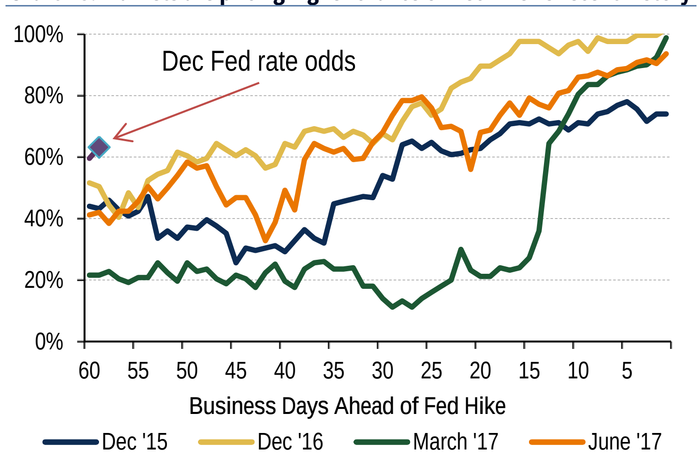
The FOMC statement acknowledged that hurricane-related disruptions and rebuilding will affect economic activity in the near term, but that the storms are unlikely to materially alter the course of the economy over the medium term. This suggests that the Fed will have a higher tolerance to look through any upcoming softness in growth- or inflation-related data and instead rely on their own forecasts until the hurricane-related disruptions fade. Downward revisions to the Fed's 2017 and 2018 core inflation forecasts indicate a lowering of the bar on required inflation in order to justify a third hike this year and three additional hikes next year.

With core PCE already near the 2017 SEP year-end target and stabilization in the most recent CPI reading, the Fed's confidence in the inflation outlook will likely increase especially if headline inflation measures are boosted by the temporary rise in gasoline and other commodity prices. Given the low hurdle the Fed has established, the greatest risks to a December hike outlook now would arise from increased geopolitical tensions, no legislative progress in DC, or a sharp tightening of financial conditions.

Chart 17: Likelihood of a December hike has sharply increased

Source: BofA Merrill Lynch Global Research, Bloomberg

Chart 18: Markets are pricing higher chance of Dec hike vs recent history



Source: BofA Merrill Lynch Global Research, Bloomberg

The market increased the probability that it assigns to a December FOMC rate hike following the Fed. The market assigns around a 65% probability to a December rate hike which is elevated in relation to 3-month ahead market pricing for other Fed rate hikes this cycle (Chart 17). For each of the other hikes this cycle, the market has on average only priced in roughly a 40% chance of a hike at this stage (Chart 18).

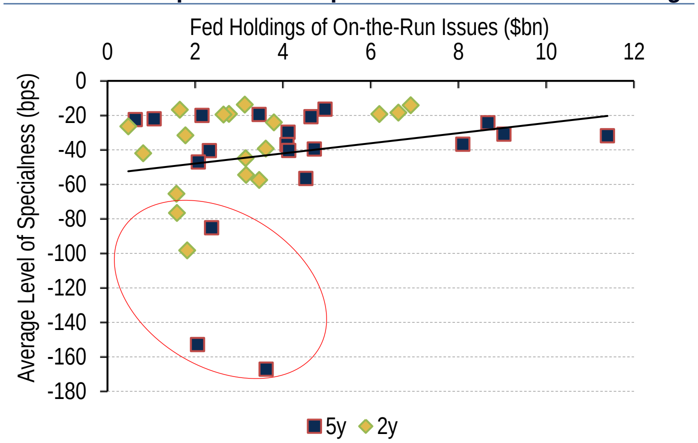
Given the shift in Fed pricing, we expect that money market investors will continue to demand full compensation for the risk of a December rate hike. This should mean that bills and discos out to 6 months will provide virtually no concession vs breakeven rates in relation to the Fed's ON RRP (similar to today). It should also mean that short term investors will gravitate towards floating rate CP or require that fixed rate CP levels backup somewhat from current pricing.

Fed has indicated high hurdle to stop balance sheet reduction process

Chair Yellen in her press conference indicated the Fed has a high hurdle to stop the Fed's portfolio reduction process. She noted the Fed is committed to making the fed funds rate the active policy tool and that even if a downward shock were to hit, the Fed would first reduce rates, perhaps even to zero, before restarting reinvestments. We expect that the high bar to stop portfolio reduction will be upheld by any successor to Chair Yellen given most contenders also dislike the large Fed's balance sheet.

The high bar to cease the portfolio unwind established by Chair Yellen means that overall USD funding conditions should tighten over coming years, which we have previously discussed here and here. We see risks that funding conditions could start to show signs of tightening starting as early as Q2 next year amidst a step up in the pace of reserve draining. This draining would come from (1) an increase in the pace of Fed portfolio unwind to $90 bn over the quarter (2) Treasury boosting their cash balance to $350 - $400 bn assuming a debt limit resolution by mid-March. Such funding pressures should result in wider FRA-OIS spreads and 3s1s LIBOR basis, a flattening of both of these curves, and more negative USD cross currency basis levels.

Chart 19: 2 & 5Y specialness most pronounced with smaller Fed holdings



Note: chart shows average specialness over OTR life cycle by issue since 2016. Source: BofA Merrill Lynch Global Research

Table 2: Fed reinvestments concentrated in mid-month issues ($bn)

Mid-Month	3Y	10Y	30Y
2017	2.9	2.8	1.8
2018	1.9	5.5	3.6
2019	2.7	7.9	5.1
2020	1.9	5.5	3.6
End-Month	2Y	5Y	7Y
2017	1.7	2.2	1.8
2018	2.9	3.8	3.1
2019	0.6	0.8	0.7
2020	0.3	0.4	0.3

Note: data shows average Fed reinvestment amount by new issue per year; assumes relatively distribution of Treasury auction sizes remains unchanged. Source: BofA Merrill Lynch Global Research

The high hurdle to stop the Fed's portfolio reduction process should also result in more pronounced repo specialness and potentially higher Treasury fails over coming years. This is due to the fact that Fed will have less to reinvest in on-the-run Treasury securities that it would otherwise make available through its daily securities lending program. The NY Fed announced that they would continue reinvesting maturing Treasury proceeds above the cap in-line with what we discussed here. This method of reinvestment will over time result in SOMA reinvesting larger amounts in mid-month issues (3s, 10s, 30s) and lower amounts in end-month issues (2s,5s,7s, TIPS, FRNs). All else equal, the recent history of Fed holdings & specialness suggests that this should result in greater scarcity premium for some end of month issues, especially 2- and 5-year notes (Chart 19). The Fed reinvestment plan will help mitigate the extent of 10 and 30Y specials trading given the higher expected SOMA rollovers at this part of the curve (Table 2). Fed holdings are of course not the only determinant of specials trading, but lower levels in SOMA should allow for greater repo scarcity premiums given the smaller consistent source of supply available to borrow from the Fed.

Front end – UK

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- We struggle to see the BoE following a rate hike with a second anytime soon. We therefore look to fade the steepness in the very front end of the curve.

Front end flatteners look attractive

Last week's moves in the front end look overdone to us. While a hike in November looks to be likely absent any significant disappointments in the data between now and then, we see the chances of this being followed by another hike in quick succession as unlikely. With the market now pricing in a second hike by this time next year, we like flatteners in the front end of the curve.

BoE not hiking for good reasons

As laid out in the UK section of our Europe Economics Weekly, we see inflation peaking in Q4 this year and consequently falling back to the BoE's 2% target by the middle of next year. Given growth at 0.3-0.4% qoq, the BoE is not hiking for good reasons. Therefore while the MPC seem relatively set on hiking rates soon, we do not believe the UK's economic performance from here will warrant any further hikes. Rather the BoE could once again by talking about cuts by the end of 2018.

A hike in November will be the first in ten years

The last time the BoE hiked rates was in July 2007 from 5.5% to 5.75%. Since then Bank rate has been cut all the way to its current 0.25%. This will likely leave the BoE somewhat apprehensive about the first hike and the impact it may have on the economy. Although a single 25bp will not shift the growth and inflation dynamics of the economy significantly, the BoE will likely want to wait until they have enough data to get a sense of the extent of its impact.

Their previous estimates suggest they see the peak impact on the economy of a change in Bank rate as between 6-8 quarters later. Therefore to us this suggests the chances of a hike being followed by another three months later as very slim. Following on from this, if the BoE do hike in November, the earliest they are likely to be willing to hike again is May 2018 (even this looks too soon to us). Yet if our inflation forecasts are right then CPI will be back below 2.5% and on a relatively sharp downward trajectory by then. We consequently see the chances of a second hike as slim.

We like fading the steepness in the very front end

The market is now pricing more than one hike by February next year, with two hikes fully priced by September 2018. This looks overdone to us and so we look for ways to fade the steepness in the very front end of the curve. Table 3 looks at the current pricing in the Sonia curve versus fair value in a scenario where the BoE hikes once in November to 0.5% and keeps Bank rate constant thereafter.

Table 3: Current OIS pricing versus fair value under a 'one and done' scenario, bp

	Current price	One and done scenario	3m carry with Nov hike (flattener for curve)
1y	51	42	4.2
2y	65	44	3.8
3y	75	45	3.4
1s2s	14	2	-0.1
2s3s	10	1	-0.1
1s3s	24	3	-0.2

Source: BofA Merrill Lynch Global Research

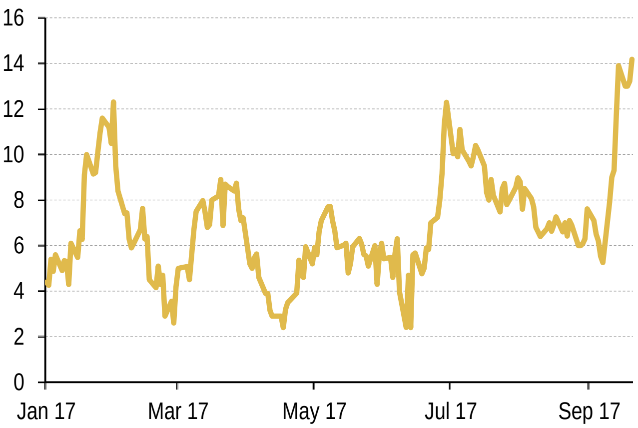
While Table 3 indicates the expected changes to the spot OIS curve in a 'one and done' scenario', the negative carry makes expressing the trade in these terms less attractive. **We recommend using the MPC-dated forwards to express our flattening view. We recommend a Dec17 – Dec18 MPC-dated OIS flattener, entered at 33.5bp, targeting 12bp with a stop at 39bp.** The risk to this trade are both the BoE hiking more than once over the next two years or not hiking in November.

This trade can similarly be expressed in Short Sterling, with Chart 20 showing the Dec17-Dec19 spreads is currently at its widest levels so far this year.

Chart 20: Dec17-Dec19 spread at widest levels this year, bp

Source: BofA Merrill Lynch Global Research

Chart 21: 1s2s OIS curve also at steepest levels in 2017, bp



Source: BofA Merrill Lynch Global Research

Volatility – US

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- Unlike three weeks ago, our analysis suggests that 2s-5s now have room to bull steepen if rates were to decline.
- We recommend conditional bull steepeners to hedge against a disappointment in data, political process and /or geopolitics.

This piece was originally published in US Rates Alpha on Sept 21, 2017

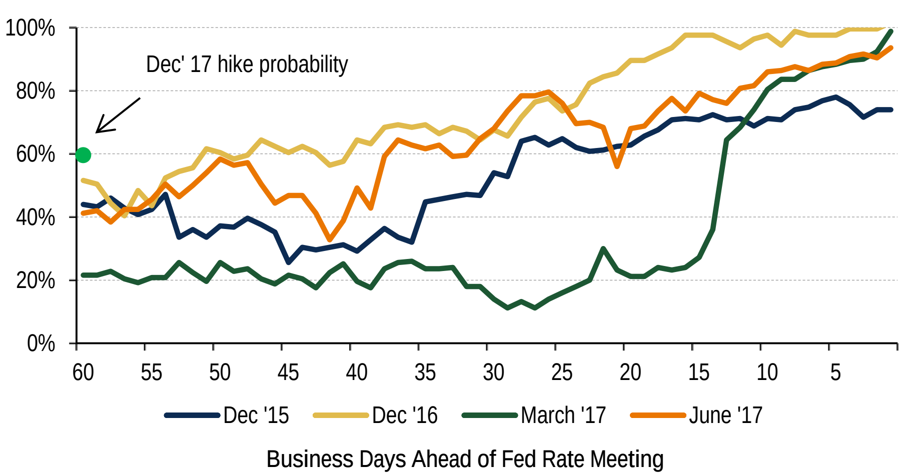
Enter 2s-5s conditional bull steepeners

The rates market saw a sharp sell-off after Wednesday's FOMC meeting led by the front end of the curve, as the Fed signaled more certainty around a Dec hike. While we generally remain bearish duration (see a different ball game), risk-reward now suggests that the front end can also participate in a rate rally.

As Chart 22shows, Dec hike probability is already at 60%, a level the market has never reached this far ahead of a meeting in this hiking cycle. From economic data perspective, we still have three payrolls and CPI reports ahead of us, which could be volatile. From a policy perspective, while we are hopeful, the process of the tax reform and budget deficit debate can still very much bring market uncertainty. Additionally, geopolitical concerns around North Korea still persist. Our analysis in Table 4 suggests that any rally from here that sees a pricing out of a December hike results in a bull steepening of the 2s-5s curve. Note that this is different to a few weeks ago, when rallies were largely likely to be bull flatteners.

In addition, the trade looks attractive from a carry and vol pickup perspective, with 8.2bp pick-up to forward curve and 12.8bp pick to spot curve. While a rally is not our central scenario, the trade benefits in a geopolitical / negative data shock that lowers Dec hike probabilities from here.

Chart 22: The market has never priced a 60% hiking probability this far ahead of a meeting this cycle



Source: BofA Merrill Lynch Global Research, Bloomberg

The trade

We recommend entering a 6m 2s5s conditional bull steepener. We buy $242mm of 6m 2y receiver at 1.837% (ATMF) and simultaneously sell $100mm 6m5y receiver at 1.973% (ATMF-8bp) for zero cost. We target P&L of +$400K and stop loss of $-200K. Pricing as of 7:30am September 21, notionals are for reference only.

The risk to the trade is a sharp curve flattening if the 5y part of the curve rallies more if tax reform disappointments.

Table 4: Fair value simulation under various hiking scenarios

	3 hikes in 2018		2 hikes in 2018		1 hike in 2018		Current
	1 more '17	no more '17	1 more '17	no more '17	1 more '17	no more '17	(9/20)
Levels							
2s	1.77	1.58	1.62	1.41	1.49	1.28	1.44
3s	2.03	1.91	1.92	1.72	1.69	1.47	1.59
5s	2.32	2.24	2.25	2.13	2.06	1.84	1.88
Changes from current market level							
2s	33	14	18	-3	5	-15	-
3s	44	32	33	13	10	-12	-
5s	44	36	37	25	18	-3	-

Note: We assume a 2.5% terminal rate, hiking path beyond 2018 follow the same pace as 2018 if it hasn't reached 2.5%;
Source: BofA Merrill Lynch Global Research, Bloomberg

Spreads – US I

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- The Republican party has made a stunning reversal on its view of Fannie and Freddie and now supports their role in the future of mortgage finance.
- The Republican National Committee joined Democrats and FHFA in calling for capital retention Fannie and Freddie – which we continue to see as the only realistic option for GSE reform.
- We think a capital retention plan will mostly impact equity and preferreds but there are several potential scenarios, some of which could lead to moderately wider debt spreads, but these scenarios have declined in probability.

In July 2016, the Republican National Committee published the 2016 Republican Party Platform in the midst of a contentious 2016 presidential election race to make clear its principles and priorities. In that document the RNC wrote: "For nine years, Fannie Mae and Freddie Mac have been in conservatorship. Their […] business model lets shareholders and executives reap huge profits while the taxpayers cover all loses. The utility of both agencies should be reconsidered as a Republican administration clears away the jumble of subsidies and controls that complicate and distort home-buying." This discussion appeared on page 4, ahead of the discussion of infrastructure investment, the public debt, and the Federal Reserve.

180-degree turn creates a much stronger consensus

This RNC stance on Fannie and Freddie, in our view, was mostly shaped by a few leading Republican policy makers, including Representative Jeb Hensarling and Senator Bob Corker. Hensarling proposed legislation (the PATH Act) to entirely wind down the GSEs and develop private mortgage finance without government subsidy. Corker took an extra step – somewhat appealing to Democrats - to replace them with a government agenc that guarantees MBS. As a result, the only bipartisan proposals that developed in Congrees while Hensarling and Corker led were the Corker-Warner/Johnson-Crapo bills and these proposals envisioned a complete dissolution of Fannie and Freddie and establishment of a new government-run finance system. From mid-2014 through recently, it seemed that Johnson-Crapo represented the only way forward but a bill never got close to passing because eliminating Fannie/Freddie carried risks that were not adequately understood and adressed. But the latest Republican National Committee (RNC) publication in our view has led to a new consensus which we find much more powerful and easy to implement, without risks of throwing out a system that works. In "Resolution Protecting Taxpayers by Restoring Safety and Soundness to Government-Sponsored Enterprises," the RNC states:

- For decades, Fannie/Freddie have fulfilled their role of providing the mortgage market with adequate liquidity at all times, enabling the uniquely American and highly popular 30-year fixed rate mortgage to exist.
- Since 2008 Fannie and Freddie have been held captive in perpetual federal conservatorship that has hamstrung their ability to help communities gain access to homeownership.
- Taxpayers will not be sufficiently protected until Fannie and Freddie are permitted to rebuild equity capital.
- The RNC calls on the President and Congress to support administrative action that restores safety and soundness to Fannie and Freddie.

Capitalizing Fannie/Freddie = keeping Fannie/Freddie

In our view, the call to restore safety and soundness to Fannie/Freddie is tantamount to a call to preserve them and the 30-year fixed rate mortgages they enable. While Treasury Secretary Mnuchin is not part of the RNC, we would expect the views of the RNC to provide the best reflection of what Mnuchin intends to do. Given that Mnuchin has discussed all year that GSE reform plans are a high priorotity and his team at Treasury continues work on the issue with an expected release date in the first half of next year, we expect the published RNC resolution to generally in line with Mnuchin's plans.

It is important to note that the RNC is now in line both with FHFA calls to build capital and restore safety, and also Democractic recapitalization calls reiterated just recently in a 13 September letter to Treasury and FHA from Semate Banking Committeee Democrats. Consensus appears to have formed around what we have identified for several years now – starting with Democrat Harry Reid's comments in 2012 questioning President Obama's wish to replace Fannie/Freddie – that the economically superior path forward for housing finance is to simply retain Fannie and Freddie and all of the associated infrastructure but to make them safer, better regulated, and less reliant on taxpayer support in future downturns.

Spreads – US II

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- We recommend buying 2y Canadian government bonds versus 2y US Treasuries.
- Markets have priced an 80% chance of another BoC hike this year, while BoC has begun to guide markets more dovishly.
- If BoC delivers the market's hawkish expectations, the Fed could likely deliver more than what is priced for the US

This piece was originally published in US Rates Alpha on Sept 19, 2017

Buy 2y CAD vs 2y US

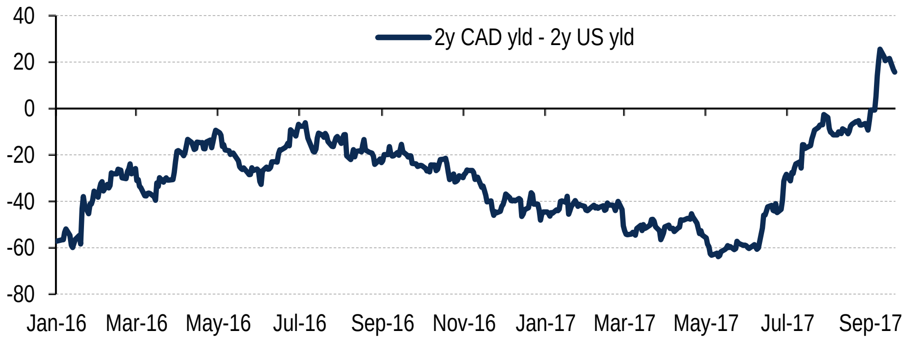
BoC Deputy Governor Timothy Lane yesterday produced the first official BoC policy remarks since the 6 September BoC surprise hike. We interpreted Gov. Lane's remarks as consistent with our current thinking that BoC is now in an assessment period. Having delivered 2 surprise hikes in the past 3 months, the BoC now appears keen to observe the impact of its actions – including the impact on households and the housing market as well as the impact of a Canadian dollar which has appreciated more than 10% in a 4-month period. Gov. Lane also pointed to ongoing NAFTA negotiations as another factor as it weighs further accommodation removal. We expect Canadian growth to decelerate and for inflation pressures to remain low.

If BoC surprises to the upside, the Fed may too

In the event that we're wrong, and positive economic developments bring another BoC hike this year, we think the context is likely to be one in which global growth is surprising to the upside, and in this case the Fed is also likely to be on the move. There is currently a 50% chance of a Fed hike by the December meeting, and a full Fed hike priced by June 2018. While we don't see additional Fed hikes as a pre-condition for BoC hikes, the currency issue for BoC would be more manageable if the Fed were hiking moderately more than what is priced. In either case, we think there is scope for markets to further align pricing of the policy paths in the US and Canada.

We buy CAN 0.75% 8/1/19 vs UST 1.25% 8/31/19 at a spread of +16bp, with a target of 0bp and a stop of +23bp.

Chart 23: 2y CAD yields are near local highs versus 2y US yields



Source: BofA Merrill Lynch Global Research, Bloomberg

Risks

The risk is that BoC surprises with a hike in its next meeting on 25 October, which is priced at about a 30% chance. Another is that the Fed in its meeting tomorrow delivers a dovish outlook, either by reducing the median dot for 2017 to no more hikes, or by reducing the median number of hikes for 2018.

Inflation – EU

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- We show how convexity makes a big difference for matched-maturity 30y OAT BE shorts. We also like this trade for the macro story, carry and as an ECB taper play.

See "A Euro breakeven short with "powered-up" convexity value" for full report

Isn't convexity just "nice to have"?

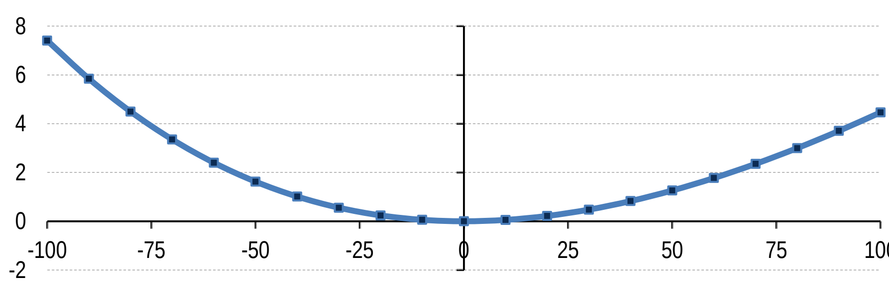
We believe long-dated Eurozone breakevens are too expensive and that the breakeven curve beyond 10-years is too steep, and we have already written a great deal about why we think this. Here we want to focus on how to express the trade, recommending being short the 30-year OATei linker versus the 50-year OAT nominal. This is a large maturity mismatch, but the ultra-long is nevertheless the closest nominal to the linker in duration terms.

Using the 2066 nominal lifts the breakeven to be shorted to 192bp, offering the prospect of strong underlying carry. It also means the trade has a significantly long convexity position. Inside, we try to pin down what that convexity advantage actually meant for performance over the past 12 months. We were surprised; in this instance convexity looks like something more significant than just being "nice to have". That appears to be because nominal yields tend to be more volatile than real yields, powering-up the nominal's convexity advantage

Convexity – just "nice to have" or something more?

The last few years have seen considerable ultra-long issuance in the Eurozone, the UK and elsewhere. 100-year bonds from Argentina and Austria are but two eye-catching examples, prompting one to wonder whether sovereigns have decided to issue century bonds in alphabetical order. Research about such bonds often references their convexity benefits, often with a picture that looks something like Chart 24. It shows the "return from convexity" for a 30s50s yield curve flattening trade (in this case using the 2047 and 2067 nominal BTP issues) for different parallel yield curve shifts.

Chart 24: BTPS 2047/2067 flattener - P&L (bp, y-axis) for instant parallel yield curve shifts (bp, x-axis)



Source: BofA Merrill Lynch Global Research

Time for some time

We regard long-end Euro breakevens as very expensive, with the inflation curve beyond 10 years as unjustifiably steep, as we have discussed on several occasions (including here). We believe that "lowflation" is now firmly entrenched, so a short 30y breakeven trade appeals.

A long breakeven position in OATei 2047 against a 2066 matched duration nominal would be a short convexity position, so shorting 30-year breakeven in this way has positive convexity. The matched duration trade is also intuitively preferable to us, rather than one with the standard nominal comparator; it gives us a position that is more akin to a 30-year zero coupon inflation swap and a higher breakeven entry of level of 192bp to short (because the 30s50s nominal curve is positively sloped). Also, since the 50-year nominal is beyond the ECB's purchase horizon, it should not be directly hampered by ECB tapering in the way that the 30-year linker might be.

The "beta" lifts the value of convexity for this breakeven short

The mathematical convexity advantage for this particular breakeven short rests on the fact that the 2066 nominal has 8% more duration than the linker, but 47% more convexity. In spite of that, a 6.9bp "convexity contribution" over a year seemed like a lot to us. The thing that "powers up" the realized value of convexity here appears to be the real yield/nominal yield beta. Nominal yields tend to be more volatile than real yields. The realized convexity value is the product of a bond's convexity and its realized yield volatility and both should be higher for the 2066 nominal.

In the original report we recommended a short breakeven trade using OATei 2047 versus OAT 2066 at 192bp, targeting 165bp with a stop-loss at 208bp.

We believe we have demonstrated that convexity can make a meaningful contribution over 12 months. The underlying carry trend should also be favorable, with the breakeven considerably higher than the 1-year inflation swap rate (1.25%) and our expectations.

Risk to the trade is unanticipated heavy supply of the 50-year nominal.

Technicals

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Signal calls for tactical relief rally

- Charts 24 and 25 show the recent rise in US 10y and 30y yield. Ending Thursday, yield closed higher than the close four days prior nine days in row. This is called a TD Setup "9" signal and suggests the prior trend has moved too far too fast and may begin a correction.

- Table 5 and 6 show the number of times this signal has occurred while yield is below the 200d SMA. Out of 35 occurrences since 1990, US 10 year yield has closed lower 2-5 days later 66-71% of the time or about 24 of 35 occurrences. US 30y yield has closed lower 65% of the time 4 days later, or 22 of 34 occurrences.

Table 5: US 10y yield – TD Setup when below the 200d SMA

	1 Day	2 Day	3 Day	4 Day	5 Day
Up	17	10	12	11	11
Down	17	25	23	24	24
Total	34	35	35	35	35
Down Ratio	50%	71%	66%	69%	69%
Average	-0.14	-0.55	-0.59	-0.61	-0.91
Median	0.00	-0.28	-0.76	-0.84	-0.83
Max	4.74	4.55	6.13	4.68	4.97
Min	-5.72	-7.73	-6.77	-6.92	-7.86

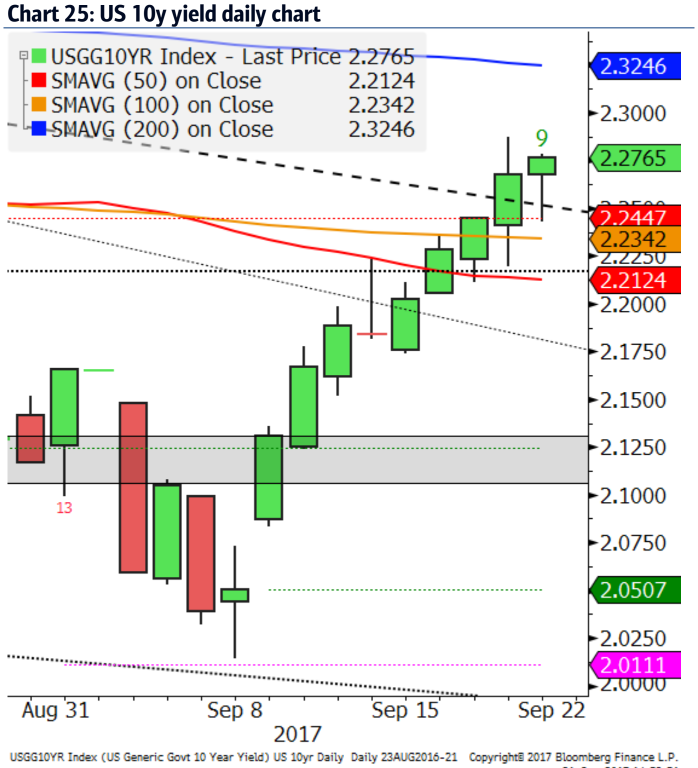
Source: BofA Merrill Lynch Global Research

Table 6: US 30y yield - TD Setup signal when below the 200d SMA

	1 Day	2 Day	3 Day	4 Day	5 Day
Up	15	17	13	12	16
Down	17	17	21	22	18
Total	32	34	34	34	34
Down Ratio	53%	50%	62%	65%	53%
Average	0.00	-0.05	-0.16	-0.11	-0.10
Median	0.00	-0.06	-0.45	-0.58	-0.27
Max	3.29	4.97	6.27	9.22	6.21
Min	-3.57	-2.87	-2.51	-3.47	-3.96

Source: BofA Merrill Lynch Global Research

Chart 25: US 10y yield daily chart



Source: BofA Merrill Lynch Global Research, Bloomberg

Chart 26: US 30y yield daily chart

Source: BofA Merrill Lynch Global Research, Bloomberg

Special topic I

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This piece was originally published in Global Rates & FX Watch on Sept. 20, 2017

- With the cause of the EUR rally dividing the ECB, we find that BoP data can provide some much needed insight. July saw European equity inflows surge to 5y highs
- Elsewhere, foreigner investors sold 40bn of EUR govies following Draghi's Sintra speech, the most this year. EA investors bought record amounts of foreign bonds

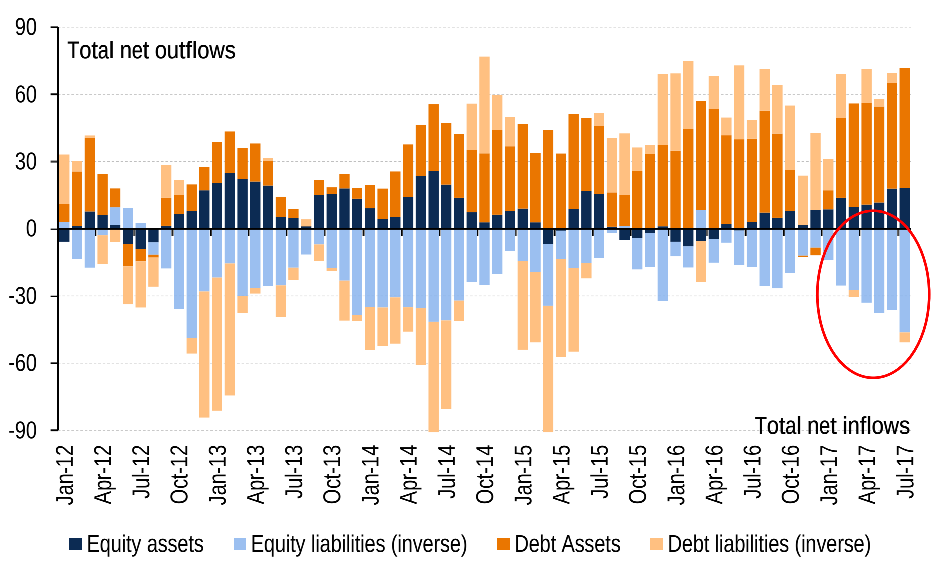
Euro Area BoP can provide much needed insight for ECB

The recent EUR strength has many, including the ECB themselves, wondering about the exact drivers of the move. How much is exogenous, how much is endogenous and how much, if any, is going to be persistent? In the context of such questions, the Euro Area Balance of payment data can provide some much needed insight into the flows behind the EUR strength. Below we review the data for July, released on Tuesday.

Equity/investment fund inflows rise to 5y highs…

Chart 27 highlights the surging inflows into Euro Area equities/investment funds. Indeed, between May and July, equity inflows totaled almost €140bn, with Europe in somewhat of a "sweet spot". A more robust growth outlook, coupled with an accommodative central bank that will not curtail the strengthening recovery, kept European risk assets well supported, and external inflows continuing.

Chart 27: Foreign investor flows into Euro Area equities* rose to their highest level since late 2012
Euro Area Balance of Payment flows: 3m average, €bn



Source: ECB, BofA Merrill Lynch Global Research. *Equity includes investment fund shares. Latest observation: July 2017
For assets, a positive (negative) number indicates net purchases (sales) of non-euro area securities by euro area investors. For liabilities, a positive (negative) number indicates net sales (purchases) of euro area securities by non-euro area investors.

An interesting point to note here, is that the "equity" classification used in Chart 27, also includes inflows into EA investment funds from abroad. Considering the performance of EA equities in July, the rising inflows in Chart 27 may also reflect growing foreign interest in Euro Area corporate bonds, something our credit strategists have highlighted on a number of occasions.

...with implications for the EUR

The surge in equity inflows into Europe has coincided with the strongest month of the year for the EUR which rallied by 3.6% versus USD. Foreign investor demand for European equities on an un-hedged basis has been a consistent theme for much of this year. Indeed, year-to-date and in USD terms, the Euro-Stoxx 50 has outperformed the S&P by a 2-1 ratio.

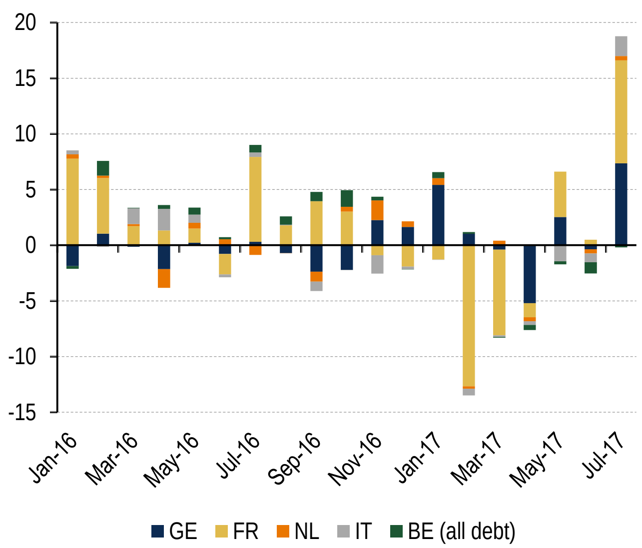
The size of the equity inflows combined with the surge in the EUR indeed suggests these inflows have increasingly been on an un-hedged basis through the summer months. Furthermore, our own flow indicators suggest that central banks were buying EUR through the early weeks of August. We await the August balance of payments data to see if these flows have resulted in any corresponding shift in bond flows.

EUR government bonds sold following Sintra

Focusing on bond flows, it is interesting to note that foreign investors sold €40bn of EUR government bonds in July, the largest month of selling so far this year. These sales coincided with the bond sell-off following Draghi's Sintra speech, when Bund yields hit 18 month highs of 60bp.

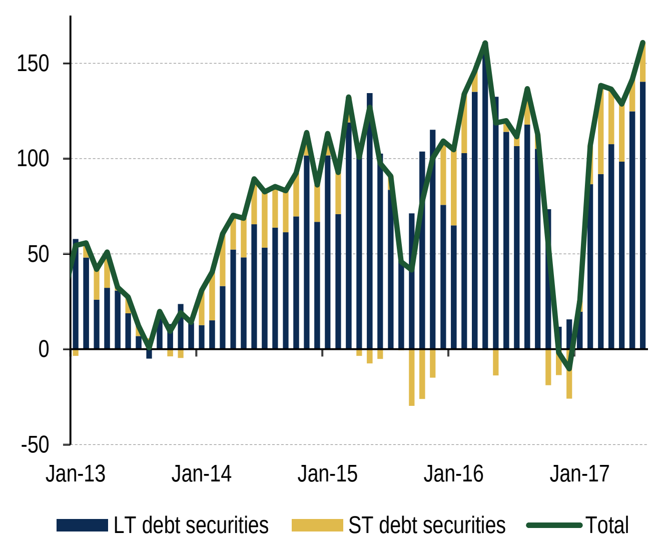
Interestingly, these bond sales came amid significant EUR govie bond buying by Japanese investors (Chart 28), suggesting the selling by other foreign accounts in July was even larger.

Chart 28: Jul saw record EGB* buying by Japanese accounts as yields rose



Source: MoF, BofA Merrill Lynch Global Research
*EGB = European Govt Bonds. Figures are in EUR bn.

Chart 29: EUR investor purchases of non-EA debt securities (€bn,3m rolling sum)



Source: ECB, BofA Merrill Lynch Global Research

EUR investors purchase records amounts of foreign bonds

Turning the analysis to what European investors are doing themselves, we find that purchases of foreign bonds continue to accelerate, despite the backup in domestic yields seen in July. In the May-July period, European investors bought a total of €160bn of foreign bonds, the most on record (Chart 29).

One final point to note is the tentative rise in Euro Area investment in foreign equities/investment funds (Chart 27). This may also coincide with large EM inflows (see the latest 'Flow Show' here).

Special Topic II

This piece was originally published in US Rate Watch on 9/19/2017

- With the slowdown in dollar weakness and the UST rates back-up, focus on flows shifts from reserve managers back to private investors.

Flows that will matter in USTs

In our view, the most critical flow trend to watch now is the balance between reserve manager and foreign private flows. A weaker USD (-8%) and strong EM inflows have triggered larger than expected reserve buying of USTs year-to-date. The recent TIC data show that official accounts have bought ~$220bn YTD to July, with the more up-to-date NY Fed data showing further growth since August. Meanwhile, the much talked about Japanese private flow into foreign bonds has been relatively quiet since the beginning of August ($0.3bn in the last four weeks).

Now we stand at a crucial juncture – with the dollar weakness slowing (especially after the PBOC announcement on 9/8) and rates backing up to close to 2.25%. – Official flow could slow down while MTD highs in yields could trigger some Japanese private buying. This would have implications on the curve (Japanese private flow is centered around 7-10y point, while official flow is arguably shorter). In short, shift focus back to JSIABOND Index (weekly Japan private flows) from FARWMSFT Index (weekly custody holdings).

The domestic flow picture

Among domestic investors, we think positioning has been close to neutral to slightly overweight in August. Total return funds barely underperformed the AGG despite wider credit spreads, indicating performance was boosted by duration longs. The most recent CFTC data suggest that asset managers may have used the rally in early Sept to reduce their UST longs – asset managers sold $17bn 10y equivalents between 9/5 - 9/12.

Table 7: Position and flow in the US Treasury market

	Current* Level	4-week Flow	52-week Flow	4-week z-score		52-week z-score		Flow data As of
Domestic ($bn)								
Pension + insurance	549	3	31	△	0.4	△	2.1	31-Aug
Banks	592	(3)	3	▼	(0.3)	▼	(0.4)	30-Aug
Mutual funds	980	11	104	△	0.5	△	1.0	13-Sep
Money fund (UST only)	593	9	49	△	0.2	△	0.2	13-Sep
Dealers	68	(6)	(1)	▼	(0.6)	▼	(0.7)	6-Sep
Foreigners ($bn)								
Foreign official	4,035	39	24	△	0.8	▼	(0.9)	31-Jul
Custody holdings (NY Fed)	3,045	33	218	△	0.7	△	0.3	13-Sep
Foreign private	2,216	40	(24)	△	1.8	▼	(1.8)	31-Jul
Japan Private (MoF)	-	0	46	▼	(0.2)	▼	(0.8)	8-Sep
Auction allotment (Treasury)	-	15.5%	15.2%	△	0.2	▼	(1.1)	31-Aug
China	1,166	20	(53)	△	0.9	▼	(0.9)	31-Jul
China + Belgium	1,265	21	(108)	△	0.9	▼	(1.2)	31-Jul
Japan	1,113	22	(42)	△	2.1	▼	(1.2)	31-Jul
Futures (ex. ED, in $bn 10y equivalent)								
Asset managers	232	(2)	102	▼	(0.5)	△	1.2	12-Sep
Leveraged funds	(134)	(6)	(36)	▼	(0.2)	▼	(0.7)	12-Sep
Dealers	(82)	(2)	(45)	→	0.1	▼	(1.0)	12-Sep
Others	2	1	(17)	△	0.2	▼	(1.0)	12-Sep

Source: BofA Merrill Lynch Global Research, Treasury Department, ICI, CFTC, MoF Japan, Federal Reserve, EPFR

Rates Alpha trade recommendations

Table 8: Global Rates Trade Book - open trades

	Open trades	Entry date	Entry level	Target	Stop	Latest level	Trade rationale/Time horizon	Risk
Europe	Short OATei breakeven	21-Sep-17	192	165	208	193	B/E curve too steep and convexity attractive / 3m	Heavy 50y supply
	BTPei 2023-2026 real yield flattener	13-Sep-17	67	50	75	70	5y real rates too high. Italian index month end supportive / 3m	Heavy supply of the 2026 issue
	Rec 3m Dec18, pay 12m Jun20 (Eonia)	25-Aug-17	39	50	33	47	Tactical short on excessively dovish pricing / 3m	Aggressive flattening of the curve
	Dec18-Jun20 steepener	25-Aug-17	32	42	27	41	Tactical short on excessively dovish pricing / 3m	Aggressive flattening of the curve
	Short the belly of the 5s-10s-30s BTP fly	16-Jun-17	-35	-10	-50	-30.9	A carry efficient short ahead of Italian elections / 6m	A significant rally in rates or wings underperformance
	Long SPGBei 24 breakeven vs. 7y infl swap	16-Aug-17	34.1	15	45	23	Iota wide relative to ASW levels / 6M	Heavy SPGBei issuance
	Pay USD 5y5y vs EUR 5y5y	07-Aug-17	100	140	85	97	Macro and technical factors pushing for US-EU divergence	Further reduction in 10y equivalent purchases by the Bundesbank
	2y5y payer ladder ATM/ATM+25/ATM+50	28-Jul-17	-200K	200K	-400K	-153K	Positive carry trade, consistent with view that EUR rates are unlikely to selloff dramatically	A sharp selloff with rising vol and richening payer skew
	5y swap spread widener	02-Aug-17	49.0	60.0	43.0	50.2	Positive carry risk-off hedge / 6m	A sustained sell-off in Bunds, with risk assets outperforming
	Long US-EZ 10y10y inflation spread	27-Jun-17	18.0	60.0	-5.0	26.4	Relative inflation pressures, roll-down / 6m	Upcoming EURi index events
	Short the belly of the 5s-10s-30s BTP fly	16-Jun-17	-35	-10	-50	-30.8	Carry efficient exposure to supportive long-end BTP supply/demand	Underperformance of wings / decrease in BTP yields.
	Short belly of OATei 2022-24-27 barbell	12-Jun-17	16.1	8.0	20.0	14.2	Cheap RV and favourable index extension /1m	Concentration of supply in the 10y
	Pay Jan18 ECB	26-May-17	-33.2	-21.5	-36.5	-35.1	Attractive risk-reward as market is underpricing the probability of a technical hike over next year	A more dovish than expected ECB is the main risk
	SPGBei 2019-21-24 barbell	12-May-17	53.5	33	65	48.2	RV cheapening of 2024 after 10y sale	More 2024 switches into new 10y
	DBRi 2020/2030 real curve flattener	13-Mar-17	85.1	50.1	105.1	90	April reinvestment and rebalancing flows/6m	Richening of short-dated Germany
	Long 10y France vs Spain	09-Feb-17	63	120	30	72	Wider periphery on negative market outcome post French election and QE tapering /6m	On a populist win, redenomination risk does not spread to other govies
	Buy 50y BTPs vs 30y BTPS	16-Nov-16	30	-8	55	20	50y is not eligible for QE, and term premia in the 2-31y sector would increase if QE was to end/6m	Risk is ECB QE continues and peripheral risk premium stays low.
	5y fwd 2s10s inflation flattener	07-Sep-16	38	18	48	34	Forward inflation curve too steep in swaps/6m	Sharp appreciation in the EUR
	Pay 5y5y EUR 3s6s basis	10-Aug-16	11.3	13.3	10.3	11.4	Sizable corp issuance to support wider basis /6m.	corporate issuance underwhelms
UK	Dec17 – Dec18 MPC-dated OIS flattener	22-Sep-17	33.5	12	39	33.5	Too many hikes priced into the front end / 3m	BoE hikes more than once
	Short UKT 2.27% '24 vs. UKT 0.75% '23	21-Jul-17	1.1	7	-3	0.0	RV opportunity / 3m	24s sees strong demand in the BoE
	5s50s real yield curve flattener	12-Jul-17	80.3	45	98	70.7	Upcoming BoE reinvestments and Nov extensions	Continued upside surprises to RPI
	2y1y vs 10y10y basis steepener	13-Jun-17	-8.5	12	-19	-1.2	Benchmark migration flows supportive /6m	No change of benchmark to Sonia
	Short UKT 3.75% 2020 vs. OIS	24-Mar-17	-26.4	0	-40	55	Carry positive Brexit hedge/ 6m	Short-dated cash richens further
	Long UKT 2068 v short 10y20y swap	08-Dec-16	16.1	-30	40	-25.5	Demand & supply dynamics show continued demand for ultra-long end cash/6m	Long swaps continue to outperform
	GBP 2s10s 2y fwd inflation steepener	12-Aug-16	3	23	-10	-6.0	Currency pass-through to inflation subsides /6m	Sharp further fall in £
	UKTI 2050/55 flattener	12-Aug-16	1.3	-4	3.5	-7	Acquire cheap convexity/3m	Weak uptake of super-long supply
	Long RPI 3y 3.5% ZC inflation cap	21-Oct-15	26	-	-	1	£ weakness to lift inflation post-Brexit /6m	£ strength, severe recession
US	6m 2s5s conditional bull steepener	21-Sep-17	0k	+400k	-200k	0k	Post Sept FOMC, 2s5s now has room to bull steepen if rates were to decline.	Disappointment in tax reform
	Buy CAN 2y note vs US 2y note	19-Sep-17	16	0	24	14.5	Global growth warrants the convergence of policy stance between BoC and the Fed	A more hawkish BoC vs the Fed
	Long 5y breakeven	02-Aug-17	1.68%	2%	1.5%	1.75%	Moves higher in rates would be led by breakevens as the Fed is less inclined to hike rates soon.	Significant risk assets correction.
	5s30s Libor/Funds basis flattener	27-Jul-17	10	0	15	10	Moving to fixed spread Libor option would imply a flat term structure of the Libor/Funds basis curve	Warly migration of the receive libor flow in the long end to receive OIS.
	2y 3s7s bear steepener	20-Jul-17	-5k	250k	-125k	-40k	A shift higher in terminal rate as peak pessimism fades should steepen the curve / 6m	Significant shock lower to terminal rate or slowdown of hikes
	6m5y payer ladder	12-Jul-17	-100k	700k	-100k	75k	We see a transition from a CTA-led move to a slow drag higher in yields / 6m	A continued sharp rise in rates in the near term
	Long 3y 5s30s bear steepener & 1y2y payer	25-Apr-17	0	2mn	-900k	920k	Steepeners + front end shorts for deficit expansion	Significant bear flattening
	Sell 2s-3s-5s swap butterfly	01-Mar-17	-6	5	-12	-4	3y point is most vulnerable in a bearish move /6m	Dramatic slowdown in tax reform
	Buy 30y treasuries vs matched Libor swap	16-Nov-16	-56	0	-75	-32	De-regulation may contribute driving swapsreads back to pre-crisis levels /12m	The main risk is that policy changes retain strict capital requirements
	Long US$100mn 2y1y payer, 2.50%	16-Nov-16	17	48	0	3.4	We see room for the belly of the curve to reprice to the dots. Vol in 2y1y could also richen /6m	Reversal of the recent selloff on disappointment re fiscal easing
Asiapac	AUD OIS 5m vs. 12m steepener	11-Jul-17	6	25	2	12	Steady RBA this year and tighter policy expectations next year/6m	Earlier than expected shift in policy guidance this year/6m
	Long ACGB 5y breakeven	13-Mar-17	171	195	155	176	Inflation risks skewed to the upside for 2H 2017/6m	Labour market dynamics keeps wages growth subdued/6m
	QTC Jun-21 vs. ACGB Apr-26	23-Jan-17	23	45	12	32	RBA on hold and ACGB supply on longer-end/6m	Policy outlook change or risk-off event impacting credit spreads

Source: BofA Merrill Lynch Global Research. Bid/offer spreads are not accounted for in initiation and closing levels. Does not reflect tax withholdings or any investment advisory fees. Past performance is no guarantee of future results. A complete performance record is available on request. Trade initiation and termination prices are determined at the time we publish the initiation and termination of the trade. Prices used to mark current levels of open trades in our model portfolio are taken at the time the day prior to the publication of the Global Rates and FX Weekly. Trade levels are expressed in basis points when not specified in the table

Table 9: Global Rates Trade Book - closed trades

	Closed trades	Entry date	Entry level	Target	Stop	Close date	Level closed
Eurozone	1y1y vs 10y10y basis steepener	13-Jun-17	-7	1	-10.5	12-Sep-17	-1.9
	Long 3m2y ATM payer	12-May-17	87K	180K	0	10-Aug-17	Expired
	Long Mar19 Euribors	19-Jul-17	100.035	100.135	99.985	08-Aug-17	100.105
	10y German ASW widener	29-Jun-17	42	56	35	02-Aug-17	47
	Long Sep18 BKO vs Jul18 DBR	05-Jul-17	3	-2	6	17-Jul-17	-2
	4m10y 50-wide strangle	16-Mar-17	500K	1.5mln	0	14-Jul-17	Expired
	Long 3m30y vol vs 3m10y (values in ratios)	06-Apr-17	1.14	1.25	1.09	06-Jul-17	Expired
	Receive 4s on the 2s4s7s PCA-weighted fly	16-Mar-17	-12.9	-14.3	-12.1	05-Jul-17	-15.1
	Sell 10y20y EUR inflation	05-Jan-17	217	170	240	28-Jun-17	202
	Long 5y Dutch CDS	09-Feb-17	25	50	15	01-Jun-17	21
	Pay Sep17 Eonia	12-May-17	-35.2	-31.5	-37	25-May-17	-35
	Short Dec18 Euribor	07-Apr-17	100.13	100.01	100.19	25-May-17	100.11
	6m10y payer spread & receiver	09-Feb-17	670K	1200K	350K	11-May-17	350K
	Long 5y Germany against 1y1y swaps	16-Mar-17	23	43	13	25-Apr-17	19
	Long 10y BTP future vs short 2y BTP future, delta neutral	16-Mar-17	200	100	250	25-Apr-17	181
	Long OATei 47 B/E vs 30y EUR inflation	10-Feb-17	25	-5	40	25-Apr-17	25
	Long 5y5y French inflation vs Euro inflation	10-Feb-17	11.8	30	0	25-Apr-17	17.3
	3m fwd 2s5s10s receiver fly (ATM)	12-Jan-17	0	200	-100	13-Apr-17	-75
	Receiving the 3m EUR basis	14-Feb-17	-27.5	-60	-10	04-Apr17	-16
	6m30y ATM+25/ATM+50 payer spread	19-Jan-17	1.25mn	2.25mn	750K	14-Mar-17	1.34mn
	Long the Apr21 PGB vs May21 BTP	10-Nov-16	132	86	155	02-Feb-17	125
	30y/50y BTP flattener	06-Oct-16	48	25	60	02-Feb-17	25
	Short 3m5y ATM+25 payer	08-Dec-16	-200K	0	-300K	18-Jan-17	-25K
	Long 3m7y EUR vs USD OTM receiver	13-Oct-16	0K	500K	-250K	13-Jan-17	0K
	Short OATei 2047 v OAT 2066	13-Oct-16	163	130	190	05-Jan-17	190
	Receive 2y1y Eonia vs 2y1y USD OIS	23-Nov-16	170	220	145	05-Jan-17	191
	Mar17 FRA-OIS widener	21-Sep-16	6.25	10	4	05-Jan-17	3.5
	Long ATM 5y10y payer in USD vs OTM 5y10y EUR payer	04-Dec-15	0K	-	-	16-Dec-16	2500K
	Sell German 2y vs OIS, buy 10y vs OIS	16-Nov-16	-17	14	-34	08-Dec-16	-28
	Short 1x2 1y2y EUR receiver spread	03-Dec-15	0	-	-	05-Dec-16	-200K
	Long 3m30y payer spread	10-Nov-16	900K	1700K	-500K	2-Dec-16	1700K
	OATEI 2022/24/27 short fly	18-Feb-16	10.3	5	15	1-Dec-16	10
	BTPei 2026/32/41 short fly	13-Apr-16	19.5	7	26	1-Dec-16	23.9
	Buy April 2020 BTP Italia	15-Jun-16	23.6	-0.4	34.6	1-Dec-16	34.6
	Long Apr21 PGB vs Apr21 OBL#173	21-Oct-16	233	190	255	10-Nov-16	229
	Long 3m10y EUR ATM payer vs one in close to ATM in USD	14-Oct-16	0K	800K	-400K	10-Nov-16	-400K
	Long 6m10y payer spread	23-Aug-16	3.5	-	-	10-Nov-16	11
	Long 6m30y payer ladders	20-Jul-16	3.3	-	-	10-Nov-16	8
	Germany 10s30s flattener	10-Mar-16	76.3	-	-	10-Nov-16	70
	Long BTP Sep19 vs OBL Oct19	26-Oct-16	73	63	78	31-Oct-16	78
	Short Schatz ASW	15-Jul-16	41	34	45	22-Sep-16	42
	Short Feb19 OBL #168 vs. matched maturity	15-Jul-16	-21	-14	-25	22-Sep-16	-25
	Long 1y4y EUR inflation	12-Jul-16	65	90	50	22-Sep-16	88.1
	Long OATi 2025 on ASW	16-May-16	10.8	-5	19	22-Sep-16	-0.5
	Buy Aug RXU6 call @ 167 and put @ 162	16-Jun-16	1.18	-	-	22-Jul-16	0
	OATei 2018/2027 flattener	11-Mar-16	78.5	40	100	12-Jul-16	55
	Ireland 5s10s flattener	28-Apr-16	95	75	105	28-Jun-16	75
	Long 5y Italy vs Spain	27-Apr-16	-0.6	11	-7	27-Jun-16	-5
	Buy Aug call on RXU6 @ 164	27-Apr-16	0.45	2.21	0	16-Jun-16	2.21
	Short 3y ASW	28-Jan-16	-32	-10	-42	10-Jun-16	-36
	Long German 10y on ASW	23-Jan-15	-31	-45	-24	08-Jun-16	-45
	6s30s breakeven flattener	18-Jan-16	96	70	110	06-Jun-16	70
	6m30y EUR payer spreads ATM/ATM+25bp	04-Dec-15	1200K	-	-	04-Jun-16	0k
	Long 2y inflation in EU vs US	23-Mar-15	80	20	115	16-May-16	115
	Long Spain 1y2y vs Germany	02-Mar-16	80	60	95	27-Apr-16	73
	5y5y US-EZ inflation swap widener	14-Oct-15	47	75	32	03-Mar-16	58
	Long TII 2040 vs short OATei 2040	26-Sep-15	4	40	-15	03-Mar-16	19
	Long Spain 1y2y	19-Feb-16	46	25	60	02-Mar-16	27
	Short 4y fwd 15y ASW	04-Dec-15	51	25	63	02-Mar-16	63
	Short 30y breakevens	16-Nov-15	338	315	350	02-Mar-16	315
	Long Italy 5y CDS basis	23-Nov-15	60	86	-	10-Feb-16	89
	Short EUR 5y5y inflation	04-Dec-15	1.76%	1.56%	1.86%	21-Jan-16	1.56%
	Long front-end EUR vs US ATM receivers	25-Jun-15	0K	-150K	300K	18-Dec-15	165K
	Long 12m Belgium bills vs OIS	23-Nov-15	0	-8	4	09-Dec-15	-9
	Long belly of EUR 6m 2s5s10s receiver fly	01-Oct-15	0K	-	-	02-Dec-15	180K

Table 9: Global Rates Trade Book - closed trades

	Closed trades	Entry date	Entry level	Target	Stop	Close date	Level closed
UK	Pay fwd yield UKT5% 18 & UKT3.75% 20	06-Apr-17	20.8	45	8	14-Sep-17	43
	Long UKT 4.5% 2034	25-Aug-17	1.54	1.35	1.65	08-Sep-17	1.46
	Pay 10y5y GBP vs. EUR	09-Feb-17	-2	60	-30	08-Sep-17	-30
	Long UKT 5% 2025 v 2.25% 2023 on ASW	14-Dec-16	11	-1	17	14-Jul-17	5.6
	Short UKTI 2050 v UKT 2068	14-Feb-17	340	300	360	12-Jul-17	315.4
	Pay 5y UK real swap rate	07-Oct-16	-274	-235	-290	29-Jun-17	249
	Short UKT 4 2022 vs. OIS	02-Mar-17	-6	12	-15	23-Mar-17	-15
	Short breakevens UKT2024 vs UKTI2024	18-Nov-16	311	260	335	10-Mar-17	300
	Pay 2y3y real swap rate in UK vs. US	07-Sep-16	220	160	250	16-Feb-17	250
	UK 5s10s ASW flattener (I-Spread)	28-Oct-16	20	6	27	05-Dec-16	27
	UKTI 2019/22/27 short fly	12-Aug-16	21.5	8	28	1-Dec-16	10
	2022/2039 Gilt flattener	29-Sep-16	117.3	90	130	28-Oct-16	117.6
	Long UKT 4.25% 2039 on ASW	02-Sep-16	47.2	25	60	28-Oct-16	54.2
	Pay 2y3y real swap rate in UK	16-Sep-16	-243	-185	-275	06-Oct-16	-275
	Long UKTI 2019 breakeven	29-Jun-16	243.7	290	220	06-Oct-16	289
	Long UKT 2023 vs. 2025	21-Jul-16	12.8	20	8	02-Sep-16	16.7
	Long UKT 2046 vs 2045 & 2049	21-Jul-16	5.5	-5	8	02-Sep-16	3.8
	Buy LU6 99.75 call option, sell 99.125 put	27-Apr-16	1tick	-	-	18-Aug-16	1.5 ticks
	UKT 5s20s flattener	27-May-16	128	100	145	11-Aug-16	100
	Short UKT 2060 vs OAT 2060	29-Mar-16	-51	-100	-20	11-Aug-16	-3
	Receive July MPC OIS	22-Jun-16	42	-	-	14-Jul-16	46
	6m fwd 2s5s GBP swap steepener	09-Jun-16	22	40	15	27-Jun-16	15
	Short UK 10y10y inflation vs US	26-Sep-15	172	140	190	17-May-16	140
	Pay 10y fwd 20y UK real yield vs. US	26-Sep-15	238	175	270	17-May-16	196
	UKTI 2019s/2026s real yield curve flattener	14-Oct-15	61	36	76	02-Mar-16	53
US	Short 10y TIPS	16-Nov-16	35	100	0	02-Aug-17	48
	Pay 10y inflation swap	06-Sep-16	-28	40	-50	02-Aug-17	8
	Buy 98.625 puts on EDM7	01-Mar-17	4.5	15	0	01-Jun-17	0.3
	Receive May FOMC OIS at 87bp	01-Mar-17	87	81	91	3-May-17	90
	US 6m5y ATM/ATM-40bp receiver spread	10-Apr-17	640K	890K	490K	13-Apr-17	890K
	US 1y5y ATM+25bp payer	10-Apr-17	875K	1375K	625K	18-Apr-17	625K
	Pay Mar FOMC OIS at 71.5 and receive May FOMC OIS at 81	22-Feb-17	9.5	1	15	01-Mar-17	3.2
	2y Swap spread tightener	02-Feb-17	29.5	20	35	17-Feb-17	35
	Sell 6m 2s5s10s receiver fly	19-Aug-16	0K	600K	-350K	15-Feb-17	0
	Long US$100mn 3m5y payer, struck at 2.05%	16-Nov-16	7	22	0	15-Feb-17	2.9
	5s10s real yield curve steepener	07-Sep-16	22.8	70	10	02-Feb-17	60.4
	Long USCPI 1y 2% inflation cap	23-Feb-16	6	-	-	17-Jan-17	0
	Long payer 2y5y vs 3m5y	23-Sep-16	840K	1340K	640K	28-Dec-16	640K
	Buy RRB 2031	15-Jun-16	12.5	-20	30	16-Dec-16	30
	3m 5s30s bear flattener	20-Oct-16	0K	500K	-250K	15-Dec-16	871K
	Sell 2s-5s-10s swap fly (short 5y)	06-Sep-16	-8.5	10	-17	15-Dec-16	20
	3y fwd 2s10s swap flattener	18-May-16	51	25	65	15-Dec-16	23
Asiapac	Receive Feb18-OIS/3y/10y swaps butterfly	11-Jul-17	-12	-20	-6	18-Sep-17	-5
	NZ 1y vs. 5y swap steepener	30-Jan-17	92	130	72	18-May-17	72
	EuroDollar Mar18 vs. BAB Dec17 spread	24-Nov-16	44	15	24	10-Apr-17	15
	AU 2y2y vs. US 2y2y forward swap spread	24-Nov-16	36	10	60	05-Apr-17	18
	May-21 ACGB vs. paid 10y swap	19-Sep-16	51	80	35	10-Nov-16	80
	AU NZ 2y swap spread (s/q vs s/s)	02-Aug-16	36	20	46	4-Nov-16	44
	Long NSWTC IX 2020 breakeven	21-Jun-16	106	140	85	01-Sep-16	104
	KfW19s versus NSWTC19s	07-Dec-15	42	28	-	01-Sep-16	32
	AU NZ 2y swap spread (S/Q vs S/S basis)	24-May-16	48	20	62	08-Jul-16	49
	ACGB breakeven 2018	15-Mar-16	1.58%	2.20%	-	21-Jun-16	1%
	Jun 16 - Jun 17 BAB spread	07-Dec-15	6	20	-	09-Jun-16	-25
	Nov-2020 ACGB	21-Mar-16	2.13%	1.19%	2.25%	06-May-16	1.19%
	2Y1Y forward swap	21-Mar-16	2.23%	1.90%	2.35%	06-May-16	1.85%
	AU breakeven 2020 versus 2018	07-Dec-15	9	20	5	15-Mar-16	17
	AU Itraxx vs Asia Ex-Japan Itraxx	23-Nov-15	7	25	0	26-Feb-16	0
	Paid AU 5y5y versus Rec CA 5y5y	23-Nov-15	91	120	75	26-Feb-16	101
	AU 3y10y conditional steepener 6mth fwd atm+25 4:1 zero cost	24-Aug-15	86.75		-	24-Feb-16	0
	3y2y swap	07-Dec-15	2.97%	2.80%	-	08-Jan-16	2.72%
	QTC Feb-20	07-Dec-15	2.67%	2.50%	-	08-Jan-16	2.40%
	AU breakeven 2018	17-Aug-15	1.96%	2.30%	-	07-Dec-15	1.89%
	BAB Calendar Spread Mar6-Mar7	03-Jun-15	28	40	-	07-Dec-15	0
	AU NZ 2y swap spread	04-Nov-15	80	50	90	01-Dec-15	56

Note: Bid/offer spreads not accounted for in entry and closing levels. Does not reflect tax, withholdings or any investment advisory fees. Past performance is no guarantee of future results.
A complete performance record is available on request. Inception date – 31-Jul-14. For additional discussion on baseline views, valuation and risks to closed trades, please see links to the relevant reports.
Trade recommendations are highlighted green when the closing value is greater than the entry value and red when the closing value is less than or equal to the entry value. Source: BofA Merrill Lynch Global Research

Global Rates Forecasts

Table 10: Quarter-end bond yield forecasts

		Latest	*3Q17*	*4Q17*	*1Q18*	*2Q18*
USA	3m Libor	1.32	1.35	1.60	1.85	2.10
	2y T-Note	1.35	1.40	1.55	1.65	1.80
	5y T-Note	1.77	1.90	2.15	2.25	2.35
	10y T-Note	**2.19**	**2.40**	**2.85**	**2.85**	**2.85**
	30y T-Bond	2.79	2.90	3.15	3.25	3.25
	2y Swap	1.59	1.57	1.70	1.78	1.93
	5y Swap	1.85	1.95	2.18	2.28	2.38
	10y Swap	**2.15**	**2.42**	**2.90**	**2.93**	**2.93**
Germany	3m Euribor	-0.33	-0.34	-0.33	-0.33	-0.32
	2y BKO	-0.72	-0.50	-0.55	-0.50	-0.45
	5y OBL	-0.32	-0.15	-0.15	-0.10	-0.05
	10y DBR	**0.41**	**0.50**	**0.55**	**0.60**	**0.65**
	30y DBR	1.21	1.30	1.35	1.40	1.40
	2y Swap	-0.19	-0.10	-0.10	-0.04	0.05
	5y Swap	0.19	0.27	0.30	0.35	0.43
	10y Swap	**0.84**	**0.94**	**1.02**	**1.08**	**1.09**
Japan	3m Libor	-0.03	0.00	0.00	0.00	0.00
	2y JGB	-0.13	-0.12	-0.12	-0.10	-0.10
	5y JGB	-0.10	-0.05	-0.05	-0.05	-0.05
	10y JGB	**0.05**	**0.07**	**0.07**	**0.08**	**0.08**
	2y Swap	0.03	0.05	0.05	0.07	0.07
	5y Swap	0.09	0.10	0.10	0.10	0.10
	10y Swap	**0.23**	**0.29**	**0.29**	**0.30**	**0.30**
U.K.	3m Libor	0.29	0.32	0.33	0.35	0.35
	2y UKT	0.29	0.40	0.40	0.40	0.40
	5y UKT	0.56	0.75	0.90	0.95	1.00
	10y UKT	**1.15**	**1.30**	**1.50**	**1.70**	**1.80**
	30y UKT	1.80	1.80	1.90	2.00	2.10
	2y Swap	0.65	0.75	0.75	0.75	0.75
	5y Swap	0.90	0.95	1.05	1.10	1.15
	10y Swap	**1.23**	**1.45**	**1.65**	**1.80**	**1.85**
Australia	3m BBSW	1.72	1.90	1.90	2.00	2.00
	2y ACGB	1.91	1.90	2.00	2.10	2.10
	5y ACGB	2.28	2.35	2.50	2.60	2.60
	10y ACGB	**2.73**	**2.80**	**3.05**	**3.10**	**3.10**
	3y Swap	2.31	2.20	2.35	2.45	2.45
	10y Swap	**2.89**	**3.00**	**3.20**	**3.25**	**3.25**
Canada	2y Govt	1.56	1.10	1.30	1.50	1.50
	5y Govt	1.78	1.40	1.60	1.80	1.80
	10y Govt	**2.07**	**1.70**	**1.85**	**2.00**	**2.00**
	2y Swap	1.92	1.41	1.61	1.81	1.81
	5y Swap	2.14	1.70	1.95	2.15	2.15
	10y Swap	**2.35**	**2.02**	**2.24**	**2.39**	**2.39**

Source: BofA Merrill Lynch Global Research

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